THE VVHOLE ART OF CHYRVRGERY,

Being the Theorique and Practique of the same.

Briefely composed for the benefit of those that are solicitous of their Healths in these dangerous times: But more especially for those that *delight in the Knowledge of the worthy Profession of Physicke and* Chyrurgery.

BY

Ed. Edw. D. Phys.

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TO HIS WORTHY Friends Master *Alexander Read* Doctor *of Physick, and the rest of the Brethren of* the Worshipfull Company of Chyrurgians, of the Citie of *London*: *Ed: Edwards*, Doctour of Physick, wisheth prosperitie; and good *successe in their Art, with increase of knowledge to Gods glory, and the great good of the Weale publick, &c.*

WOrthy Friends: having considered the great labour, industry, and study, required in the thrice worthy, excellent and needfull faculty of *Chyrurgerie*; which God of his great love to Mankind have ordained to preserve us. By comforting us in curing our infirmities laid upon us sinfull wretches; whereby hee will be glorified: How ought we then to use our best endevours by all meanes possible to seeke to attain to the highest degree of knowledge herein, that wee may, whereby God may be glorified, the patient releeved, and the Artist rewarded. And not to rest satisfied, as too too many doe only in what they have learned, by tradition from their

Maſters; looking only what Medicines their Maſters uſed: for Tumours, Wounds, Ulcers, &c. whoſe Maſters (no doubt) knew the differences of thoſe Infirmities with the varieties thereof, and all other circumſtances thereto belonging; and how to change, adde, or diminiſh in the uſe of their Medicines, and conſidering the times, how, where, and when to approve each thing in order and in due time: which I heartily wiſh that all the yonger ſort that intend to practiſe this worthy Faculty may ſeriouſly follow, and conſider well that they are called hereto; not only for their own gaines, as the moſt ſort (I doubt) doe perſwade themſelves, but let them ſtrive to uſe the beſt meanes chiefly to ſtirre up Gods glory, and then hee will bleſſe our labours with reward, and ſend good ſucceſſe in our practice; for if wee begin firſt with him, and make a conſcience of what wee doe, hee hath promiſed to guide and bleſſe our labours, who will not faile in his part if we doe ours faithfully, and my ſoule is grieved to ſee the daily abuſes and errours committed in many of this Profeſſion! Chiefly in the Country, of many wicked wretches, not only men but infinite Petticote Surgeons, that ſwarme in every Towne, Pariſh, and for the moſt part in every Village: that take on them to practiſe this worthy Faculty; having neither conſcience, learning, art, nor feare of God; nor never had good Tutor to inſtruct them. Yet like blind Bayards boldly adventure on that precious ſubject of Chyrurgerie; promiſing to performe, and cure all things that come under their unfortunate hands: yet neither know method nor any meanes rightly to uſe for to cure it; but for a ſhew to get money, they will apply ſome thing be it right or wrong they make little care; they will be ſure to get by the bargaine. But for the care and love that I have of thoſe that are trained up (under the true and worthy Profeſſors of this needfull and wor-

thy profeſſion) that they ſhould be ſuch as the World expects; and ſeeing they daily ſee the uſe of the practicke part at the hands of their worthy Maſters, ſo I admoniſh them all to be very carefull to uſe all meanes poſſible to attaine the theorick part of their Faculty, and to be very well ſeene therein; that they may perſevere with the light of true knowledge in that Art, to guide them the perfect way or path of perfection. For he that worketh without the perfect rules of the theoricke parts of this Art, doth worke but as a blind man that carveth a Picture: cutting ſometimes too much, ſometimes too little, as well, where hee ſhould not, as where hee ſhould, and ſo marres all. Wherefore for the better inſtruction of the younger ſort that intend to follow and practice this needfull and worthy Faculty; I have ſet forth theſe briefe inſtructions, for their better memory: as a Load-ſtone to draw them from one degree to another, both in the parts theorick and practick, with many other needfull paſſages, to be known of them, for their further good herein, with a briefe tract of Anatomy thereto annexed; all in analiſed Tables, in the which if they will diligently beſtow a little labour, and ſtudy therein, I thinke they ſhall learne more in one month, then they ſhall doe in five, in any other, formerly written in our vulgar tongue, and if they deſire further knowledge herein, they may find many great Volumes written at large concerning all thoſe things (that are herein touched, but in briefe) for their further ſatisfaction. Meane time accept my love, and zeale herein towards the true profeſſors hereof, and the good of my Country; and having this collection, I have been intreated by divers of my good Friends, to publiſh it: and for the benefit of others I am very willing to beſtow it *gratis*; for the good of many: and ſhall be ready if this be well accepted, to ſet forth divers other things worthy obſervation; although

it

it have been and will be ſomething troubleſome to mine old yeares, being now 81 and ſix moneths. Yet willing to labour to doe good to poſterity, and to give my beſt directions to any that endevour to doe good in the feare of God. For which cauſe I doe here put forth this Introduction to the publick view of all; hoping that the judicious, will herein cenſure the beſt, and herein accept my good meaning in ſetting it forth: weighing the imbecility of old age, from whom none muſt expect to have a thing ſo exactly done, as in the flouriſhing yeares and vigour of riper wits. Therefore I hope you will cenſure all the beſt way, and accept it as friendly, as I beſtow it faithfully and lovingly; ſeeing that it commeth from a minde which much regardeth your company, though acquainted with few: yet I deſire, and wiſh much happineſſe, deepe knowledge, perfect ability in your Faculty, in all the Brethren of the whole Society: with my hearty Prayers unto Almighty God, that they may all receive as much fruit by the reading of this Introduction, as I hoped they would do when I penned it. And ſo with my love I ſalute you all, and commend you to Gods bleſſed protection.

Valete in Chriſto.

Nec pudet vivere.

Nec piget mori.

TO THE READER.

Gentle Reader, I doe not write to fill thy fancies with fables or fruitlesse lines to fill papers, but I present unto thee a fruitfull garden full of comfortable flowers. I consider we that live in this iron age, (where so much impiety overwhelmeth the world, being so full fraught with an inundant deluge, or overwhelming floud of malice and disdaine) that men goe to hard edge one with another, must not care for the reproachfull taunts of envious snarlers, which wicked impes in these our dayes, swarme so abundantly, that few professions are free of such wretches, whose like informer ages was never seene; with such diabolicall devices, as impudent boasting, disdainfull mocking, complainers, false accusers, dissembling hypocrites, being part of the errours of that brood of sycophants of this age; which declare their base low prized conceits, ever shewing themselves squint eyed in all good things; who out of malitious, poysoned, and cankered disdaine, seeke ever to abuse such as meane well: for who is more wicked than those which oppose themselves against vertue, finding fault with others, yet doe no good themselves? like the dog in the manger, which will neither eate hay himselfe, nor suffer the horse to eate: but I wish all such as seeke the advancement of Gods glory, and their Countries good, neuer to be dismayed of such spitefull wretches. If the heathen held

it odious to conceale any thing that might either preserve health, or cure diseases; then how vile may we account those, that make shew to be religious Christians, *to omit it, nay, not onely so, but doe use all their endeavours to hinder such as desire to performe it. A lover of the truth ought to hide nothing secret, that hee hath found out for health, saith* Hippo, *and* Galen, vide Gal. de Compos. *but to reveale it to Gods glory, and the good of the publike weale: wherefore forasmuch as every man is bound by the lawes of God and nature, to live under the title of some honest and godly calling, and therein to endeavour himselfe to the uttermost of his power, so farre forth as God shall enable him, wherein he must above all, remember that he study and labour to advance in all his attempts and actions, first the glory of God, and then the good of his Country and Common-weale, which duty is not performed by such as do omit, either to reveale, or otherwise leave behinde them in writing, such secrets as God hath bestowed upon them, for the advancement of his glory, and to leave it to posterity, but the envious sect I thinke are drenched in the forgetfull hellish lake of frozen oblivion, out of whose peevish braines no good can be expected, and small comfort had, but rather a scoffe or a frumpe. I speake it with griefe of conscience, to thinke that there should bee such a frozen hearted crew of godlesse caitiffes, infected with that incurable poyson, unworthy the name of Christians, having their conscience (if any) seared up with a hot yron, that nothing can open it, not considering that he which hath the meanes, and doth not cherish, shall with the hider of his talent perish: these neither love God in his mercy, nor fear him in his justice, therefore not excusable in the day of vengeance, odious to God and christian charity, who with restlesse rage doe manifest their godlesse mindes, holding nothing tollerable, but what they like and allow. In what they loathe, every mite is made a monster, every trifle a trespasse, and every Gnat a Cammell; so untunable is it to their ugly eares. I thinke these persons lovingly linke in league with the devill, having obstinate wils, and barren fruitlesse hearts, senceless, except in things that feed their filthy fancies, onely they swell with intollerable pride and envy; they live Foxe-like, these participate not with that worthy renowned Knight, Sir* Philip Sidney, *who said, love them*

them that doe some good, because there be many that doe none at all: let such take heed that they perish not with such as hide their talent, therefore according to my bounden duty herein (with that poore myte which God hath indued me withall) I doe here leaue some fruits of my labours to posterity. We reade that the poore Widdowes myte, was more accepted because she gaue all, then the great gifts that were given by the mighty ones out of their superfluities. Alexander *accepted a cup of cold water at the hands of a begger, so doe I bestow these rude lines, as a token of my loue, not ambitiously for vaine glory, or as one that goeth about to instruct the learned, but the ignorant, nor to impaire the credit of any good meaning professor of this worthy faculty, for (God knoweth) I loue and reverence them, and although this worke be to me very tedious and toylesome in this mine old age, yet will I not deny the importunate request of my faithfull loving friends in satisfying their desire herein. Furthermore for my part, I hold it neither fit nor lawfull for every ignorant person that practiseth Chirurgery, being unskilfull in that deep thrise worthy learned faculty of Physicke, to undertake, or once offer to give inward medicines to any Patient, without the counsell of the learned Physitian: let them consider how pretious the subject is on which they worke, (viz. the body of man) being the image of God: yet many of these homicides (chiefly in the Country) having neither feare of God, learning, art, nor honesty, doe daily like brazenfaced monsters, boldly adventure on all the parts of physicke, wherein they have no skill, to the great dishonour of God, the utter ruine and spoyle of their unfortunate Patients, and infamy to both these worthy faculties, being as unfit thereto, as the Asse to play on the Harpe: which careless crue of abusers deserve sharpe punishment, as deceitfull malefactors and murtherers. A most lamentable thing that it should be suffered: and here for the avoyding of tedious circumstances, I doe abreviate my speeches, discoursing no further, till a more fit opportunity be offered.*

Vale in Christo.

1 The 13. principall points belonging to a Surgeon.

1 what a Surgeon is
2 what Surgery is
3 the subject of Surgery,
4 the next way to learne this art,
5 conditions are required in a Surgeon,
6 Instruments be fit both 1 medicinals 2 manuals,
7 what ever to carry with him
8 what medicines ever to have in readinesse,
9 method is best to use,
10 conditions the Patient should have,
11 in how many things the contemplation of the Surgeon doe consist,
12 the sixe things to consider before you take charge,
13 that the operations of the Surgeon ingeneral are but 3

2 That this art is generally divided into two parts, 1 *Theorica*, learning, 2 *Practica*, practice.

3 That the Surgeon worketh generally upon five indispositions against nature, as 1 Tumors against nature, 2 Wounds, 3 Vlcers, 4 Fractures, 5 Dislocations.

4 That the Surgeon accomplisheth his intent generally by 3 things, as by 1 taking away, 2 joyning, 3 reducing things 1 hurtfull, 2 divided, 3 displaced.

5 That the Surgeon taketh his indications curative generally of 3 things, as of things 1 naturall to preserve, 2 not naturall to restore, 3 against nature to destroy the.

6 That the 3 operations above said are accomplished generally by these two instruments or means, as 1 medicinals, 2 manuals, which do either binde, loose, alter the property.

Briefe answers to all the aforesaid questions, and first to the thirteen principall points aforesaid, as to know that

1 A Surgeon is natures servant to helpe nature in things pertaining to surgery.
2 Surgery is both art and science.
3 The subject of surgery is mans body being sore, &c.
4 The next way to learne this faculty, is to begin at things generall, and so come to particulars.
5 The conditions required in the Surgion are generally 2. *i.* to be
- 1 vertuous & religious
- 2 expert in his prof. both
  - 1 theoric
  - 2 practic.

6 his instruments
- 6 generally are but two, *i.*
  - medicinals
  - manuals

7
- 7 ever fit to carry with him are 6. *i.*
  - 1 probs,
  - 2 needles & stitching quil,
  - 3 mullets with spatula,
  - 4 incision knife,
  - 5 cysors,
  - 6 launcets.

8 Medicines ever to have in readinesse are generally 6. *i.e*
- 1 restrictives to stop
  - 1 bloud,
  - 2 afluxió that runs to other parts
- 2 *Basilicon* to cause matter,
- 3 *Apostolorum* to cleanse,
- 4 *Aurinum* to incarnate flesh.
- 5 *Album* to cease dolour and heat,
- 6 *Desiccativum rubrum* to dry and skin.

9 The best method to observe is generally next way to cure it
- 1 disease, cause and symptomes,
- 1 spee dily,
- 2 surely,
- 3 not to make false promises for mony, & promise no more then may

10 The conditions required of the Patient, are generally 3 *i.e.* to
- 1 hope
- 2 obey
- 3 endure

with
- 1 assurance (be performd)
- 2 diligence,
- 3 patience.

11 The contemplation of surgery do consist generally in the perfect knowledge of things,
- 1 naturall,
- 2 not naturall,
- 3 against nature.

12 He should observe before hee undertake any cure, generally fixe things, *i.*
- 1 whether lawfull before 1 God, 2 Man.
- 2 temperature of the 1 Body, 2 Members,
- 3 the sicknesse
  - 1 and nature thereof,
  - 2 if curable or not,
- 4
- 5 medicines proper for the disease,
- 6 right way of application.

13 The operations of the Surgeon are generally but three, as are before mentioned.

The two generall parts of this art follow, *i.*

1 *Theorica*, *i.* the learned part by rules, shewing the perfect waies to worke herein, gotten by reading, &c. being Science, and is divided generally into foure parts, as things

- 1 natural being 7. as
  1. Elements,
  2. Temperaments or Complexions,
  3. Humours,
  4. Members,
  5. Powers or vertues,
  6. Operations of those vertues,
  7. Spirits.
- 2 not natural, being 6. as
  1. Ayre,
  2. Meat and drinke,
  3. Sleepe and watch,
  4. Fulnesse and emptinesse,
  5. Moving and rest,
  6. Affections of the minde.
- 3 against nature being 3. as the
  1. Disease,
  2. Cause of the disease,
  3. Accidents that follow the disease
- 4 Iudicall, as to judge of diseases, what
  1. they be,
  2. nature they be of,
  3. cure or not, and the reason why they may or may not be cured,
  4. medicines and method is best.

2 *Practica*, *i.* practice shewing how to order, prepare, and to work with the hand according to the precepts of the theoricke, done by these three meanes, as by

1. Dyet, or the right use of the 6 thing, not naturall above said, in
   1. health to preserve with things like,
   2. diseases to cure with contraries.
2. medicines, which is in two forts used, either
   1. inwards,
   2. outwards.
3. Manuall operation, or hand-working, as by
   1. Incision,
   2. Stitching,
   3. Rowling.
   4. Reducing,
   5. Cauterising, &c.

Now

Now followeth the tract of the part Physiologia, or the seven things naturall aforesaid, as they lye in order.

- 1 Elements of which consider generally four things, *i.* as
  - 1 what an Element is, it is
    - 1 A body most pure and simple, unmixt,
    - 2 The least part not dividable into any other kinde.
    - 3 That whereof all things naturall have their originall.
  - 2 their
    - 2 Numbers which are foure, *i.*
      - 1 Fire,
      - 2 Ayre,
      - 3 Water,
      - 4 Earth.
    - 3 Qualities be 4. *i.*
      - 1 Fire,
      - 2 Ayre,
      - 3 Water
      - 4 Earth,
      - is
        - 1 hot and dry,
        - 2 hot and moyst,
        - 3 cold and moyst,
        - 4 cold and dry.
    - 4 operations are generally 2. *i.*
      - 1 Active, *i.* to doe as is
        - 1 heat and
        - 2 cold,
      - 2 passive to suffer to be done, as doth
        - 1 drynesse, and
        - moystnesse.

Note that these two active qualities of heat and cold, do work into the two passive qualities or drynesse and moystnesse to alter them.

2 Tempe-

- 1 generally 2. *i.* { 1 well, 2 evill } tempered,
- 2 Particularly 9. {
  - 1 four {
    - 1 simple, as { 1 hot, 2 cold, 3 moist, 4 dry,
    - 2 compound, as { hot and { 1 dry, 2 moist, cold & { 3 dry, 4 moist,
  - 2 one temperate by Equalitie of all these in perfect proportion, *rara Avis*, as hard to finde as a blacke Swan.

2 Temperaments or complexions, wherin consider generally four things, *i.e.* that they are

- 3 Either { 1 simple, 2 compound, { qualities of some or all the foure Elements, either { 1 hot, 2 cold, 3 moyst, 4 dry,
- 4 To no end knowne by the differences of temperatures, if wee know them not by their signes also: for the which reade and consider well those rules, which are set downe by *Levine Lemnie*, written in his booke called the *Touchstone of Complexions*, where you may be sufficiently instructed, which in this place is too tedious to relate at this time.

3 Humors

3 Humours be generally two, *i.*

- 1 Naturall being 4. as
  - 1 Bloud,
  - 2 Choler,
  - 3 Flegme,
  - 4 Melancholy,

  } Naturall and profitable
- 2 Vnnaturall, and are of divers sorts, as
  - 1 Bloud being either
    - too 1 thinne, 2 thicke, by 1 heat, 2 cold,
    - 2 adust & so the 1 subtile, 2 grosse, parts become 1 choler, 2 melãcholy
    - 3 distempered by mixing of other humors, as of 1 choler, 2 flegme, 3 melancholy, &c.
  - 2 Choler eyther
    - 1 Vitiline, like yolks of egges,
    - 2 Eruginous, like verdegresse,
    - 3 Prassyne, like juyce of hearbs,
    - 4 Azure or blew.
  - 3 Flegme eyther
    - 1 Vitria, like melted glasse,
    - 2 Acide, sowre like vineger,
    - 3 Salt, like brine,
    - 4 Gypsum, like white morter.
  - 4 Melancholy being of two sorts eyther of brent
    - 1 blood,
    - 2 choler, and is the worst,

Note that of these three things aforesaid, *i.* as
- 1 Elements,
- 2 Temperaments, and
- 3 humours,

all the members of the body are made.

4 Members are generally two, i.

1 Simple, being 11. as
- 1 Bones,
- 2 Cartilages or griſtles,
- 3 Ligaments,
- 4 Veines,
- 5 Arteries or heart pypes,
- 6 Nerves or ſynewes,
- 7 Cords or tendons,
- 8 Panicles or felmes,
- 9 Simple fleſh,
- 10 Fat,
- 11 Skinne,

in all theſe conſider theſe foure things, i. their
- 1 ſubſtance,
- 2 uſe or office,
- 3 temperatures,
- 4 utilities.

2 Compound, as are the
- 1 Head,
- 2 Heart,
- 3 Liver,
- 4 Lungs,
- 5 Legs,
- 6 Armes,
- 7 Hands, &c.

Whoſe other diverſities are generally five, whereof ſome are

1 Principals being 4. as the
- 1 Braine,
- 2 Heart,
- 3 Liver,
- 4 Teſticles or ſtones,

2 ſerving the principals are 4. as the
- 1 veines,
- 2 arteries,
- 3 nerves,
- 4 ſpermatick veſſels.

to carry the
- ſpirit
  - 1 naturall,
  - 2 vitall,
  - 3 animall
- 4 ſperme or ſeede.

3 Proper of themſelves and others, as the
- 1 Belly,
- 2 Kidneyes,
- 3 Matrix, &c.

4 Excrementall and not proper, as
- 1 Hayre,
- 2 Nayles.

5 Neither governed, nor doe governe others, as are the
- Bones,
- Griſtles,
- Glandles,
- Fat,
- Simple fleſh, &c.

5 Of the powers, vertues, or faculties, being three, of which proceedeth the actions, being the

- 1 Animall, whose actions generally are double, *i.*
  - 1 sensitive being also double, as,
    - 1 Externall or outwards, as,
      - 1 Seeing,
      - 2 Hearing,
      - 3 Smelling,
      - 4 Tasting,
      - 5 Touching,

      and are called the five senses.
    - 2 Intern. or inward, called the vertue principal or cõmon sense as
      - 1 imaginatiõ,
      - 2 reason,
      - 3 remẽbrãce.
  - 2 Motive done by the sinewes and muscles, being their instruments of voluntarie motion: all these proceed from the braine by the nerves.
- 2 vitall, which
  - 1 have two motions, as
    - 1 Active to dilate the heart and Arteries, as in
      - 1 joy,
      - 2 hope,
      - 3 mirth, &c.
    - 2 Passive, the heart and arteries, and to binde them, as in
      - 1 care,
      - 2 feare,
      - 3 sadnesse,
      - 4 sorrow,
      - 5 revenge,
      - 6 melancholy, &c.

  proceedeth from the heart by the arteries, and serveth to carry the spirit vital & lively heat, to all the mẽbers, which arteries or heart pipes do spring from the heart.
- 3 naturall,
  - 1 proceeding frõ the liver, sending nourishment to all parts of the body by the veins that grow out of the liver
  - 2 hence proceed the four naturall vertues, *i.* as
    - 1 attractive,
    - 2 retentive,
    - 3 disgestive,
    - 4 expulsive,

    wrought by
    - 1 heat, & 2 cold, & drith,
    - 3 heat, & 4 cold, & moysture.
  - those foure vertues doe their operations thus by degrees one after another, *i.* as
    - 1 attraction is made,
    - 2 retention til the disgestive vertue have alterd it fit,
    - 3 digestion to alter the property by heat, as aliment into Chyle, Chyle into bloud, and bloud into flesh, &c.
    - 4 expulsiõ to expel & cast out the exer. &c
  - by this faculty we doe
    - 1 nourish our bodies,
    - 2 increase and grow,
    - 3 ingender more of the kinde, &c.

6 The vertue
- 1 Animall moveth
  - 1 Apprehension,
  - 2 Fantasie,
  - 3 Imagination,
  - 4 Opinion,
  - 5 Consent, &c.

  } in the two former ventricles of the braine.
  - 1 Iudgement,
  - 2 Esteeme,
  - 3 Reason,
  - 4 Resolution,
  - 5 Disposing,
  - 6 To discerne,

  } in the middle ventricle of the braine.
  - 1 Remembrance,
  - 2 Knowledge,
  - 3 Calling to minde

  } in the hinder ventricle of the braine.
- 2 Vitall moveth,
  - 1 Mirth,
  - 2 Ioy,
  - 3 Hope,
  - 4 Trust,
  - 5 Humanity,
  - 6 Victory,
  - 7 Glory,
  - 8 Boldnesse,
  - 9 Mercy,
  - 10 Feare,
  - 11 Sadnesse,
  - 12 Despaire,
  - 13 Envy,
  - 14 Hatred,
  - 15 Anger,
  - 16 Mildnesse,
  - 17 Stubbornesse,

  } by vitall heat stirred up in us either { 1 moderate, 2 immoderat
- 3 Naturall, moveth, and
  - 1 Altereth
    - 1 Aliment into Chyle,
    - 2 Chyle into bloud and humours,
    - 3 Bloud and humors into flesh, &c.
  - 2 joyneth. 3 formeth. 4 ingendreth. 5 nourisheth. 6 increaseth.

These actions proceed from the faculty or vertue, being cause of the action, & not contrary, *i.* the action is not cause of the faculty, for the actions are certaine movings and affections as aboveſaid, stirred up by those three vertues or faculties, *i.*
- 1 animall,
- 2 vitall
- 3 naturall.

1 An ayrie substance, *i.* { 1 subtle, 2 stirring the powers to performe the office and operations.

2 Bred of the most pure and thinne parts or vapours of the bloud and humours sent to each part of the body, whereby each member may doe his office.

3 Principally, { seated, *i.* the { 1 animall, 2 vitall, 3 naturall, } in the { 1 brain, 2 heart, 3 liver, } to stir up { 1 moving & feeling, 2 heat & life, 3 nourishing,

4 { 4 sent from those foure principall members to all parts of the body *i.* the { 1 animall, 2 vitall, 3 naturall, } by the { 1 nerves, 2 arteries, 3 veynes.

Spirits, wherein consider these five things, which are

5 As a Prince doe move his Councell, and the Councell the subjects, so every one according to his vocation as it is appointed by nature, so that every inferiour must be ready to serve his superiour.

Remember diligently, seeke ever to preserve these seven things naturall aforesaid, by the right use of the sixe things not naturall, following.

note that we { 1 preserve health, 2 cure diseases, } by things { 1 like 2 contrary } in quality.

Note the spirit { 1 Vitall, is ingendred of the vapour of the vital bloud in the heart and arteries. 2 Animall, is ingendred of the spirit vitall, carried up to the head by the arteries, and there more digested, for which purpose nature hath the *Rete mirabile* in the braine, as a manifest changeable maze. 3 Naturall, infuseth and breatheth its nutritive vapours and spirits to nourish the parts of the body.

Also in these seven things naturall, consider these nine things following, whether you meant to preserve health, or to cure diseases.

 Consider

Conſider theſe nine, *i.* the

1 Strength of the patient, if that faile, medicine is uſed in vaine,

2 Complexion, which muſt be countergarded, although it be evill, as a thing of cuſtome, for cuſtome is like another nature.

3 Members
- whether
  - 1 ſimple,
  - 2 compound,
  - 3 organick, as
    - 1 principall or
    - 2 ſerving to the
    - 3 not able at all.

  } noble,
  - 4 ſenſible,
  - 5 inſenſible,

  } becauſe 1 the
    - 1 eye cannot endure ſo ſtrong a medicine as the fleſh, &c.
    - 2 nerve cannot endure ſo ſtrong a medicine as the lygament, &c.
- 2 whoſe form or figure may be unfit in
  - 1 magnitude,
  - 2 number,
  - 3 figure,
  - 4 ſituation, &c.

4 Habit; *i*, a body either
- 1 fat and fleſhy,
- 2 leane,
- 3 delicate,
- 4 ruſticke, &c.

5 Age, for often youth is curable, when the aged cannot in the like caſe, and the ſtrong ſooner than the weake, &c.

6 Sexe or kinde for
- 1 Eunuchs,
- 2 Women,
- 3 Children,

} cannot endure medicines ſo ſtrong as men.
} have bodies
- 1 weaker,
- 2 moiſter,
- 3 ſofter,

} then men of like temperament.

7 Time of the
- 1 yeare, for ſome medicines are fit in the Spring, and others in other ſeaſons in the like diſeaſe, uſed, *i.* A.
- 2 Day to obſerve order.

8 Region,
- 1 The order of cure muſt differ according to the region,
- 2 hot, } cauſe { 1 ſubtile & thin, } their { 1 coolers to thicken it
- 3 cold, } humor, { 2 groſſe & thick } uſe, { 2 heaters to make it thin

9 Cuſtome
- 1 muſt be obſerved as the proper temperature,
- as
  - 1 citizens,
  - 2 courtiers,
  - 3 eaſie livers,
  - 4 ruſtickes,
  - 5 carters,

  } muſt be uſed according to their cuſtome
- 2 brings proper ties, example if they eat or drinke either
  - Piſan,
  - Apples,
  - Milke,
  - Cheeſe,
  - Partrich, &c.

  } either they
    - 1 vomit,
    - 2 ſcowre,
    - 3 be very ſicke therewith.

Things annexed to things naturall, are foure, fit to be considered.

These foure are

1 Ages be generally, as from the
- 1 birth to 25 hot & moist,
- 2 25 to 40. hot and dry,
- 3 40 to 60. cold and dry,
- 4 60 to the end of life,

all which time the body
- 1 groweth,
- 2 is in perfect growth,
- 3 beginneth to decrease

& is
- 1 sanguine,
- 2 cholericke,
- 3 melancholicke.

4 60 to the end of life,
- 1 accidentally cold & moist
- 2 naturally cold & dry,

diminishing the strength of the body, and all the powers and faculties thereof.

2 Colour, and is in two sorts observed of the
- 1 body caused two waies, *i.*
  - 1 inward, *i.*
  - 2 outward in two sorts, *i.*

according to the
- humours abounding.
- clymat for country,
  - 1 hot make
    - 1 sallow,
    - 2 blacke,
  - 2 cold make
    - 1 white,
    - 2 pale, &c.

- 2 here be generally 4 sorts, *i.*
  - 1 blacke,
  - 2 red,
  - 3 gray,
  - 4 white,

hair signifieth,
- 1 either abundance of
  - 1 choler inflamd
  - 2 blood adusted,
- 2 too much heat, not adust,
- 3 excesse of melancholy,
- 4 lack of naturall heat, caused of putrified flegme.

3 Figure or habitude of body, as
- 1 good proportion of the foure humours, causeth good temperature, and comely proportion of body.
- 2 thicke and tall,
- 3 thin and leane,
- 4 fat and grosse,

sheweth excesse
- 2 heat and moisture, Sanguine
- 3 heat & dryness, Cholericke
- 4 cold and moist, Flegmatick.

4 Diversity of kindes are generally 3 *i.* the
- 1 male is hotter,
- 2 female is colder

then other kindes of the same complexion, as the male is hotter then the female,

Epafroditus is
- 1 both male and female,
- 2 temperate in heat and cold.

Age must not be accounted according to the number of years, but rather after the temperature of the body, for some are
- 1 old at 40.
- 2 yong at 60.

as those
- 1 cold and dry, soone waxe old.
- 2 hot and moist, are long yong and lusty.

Now

Now of the second part of the Theoricke, called Hygiena, *or* res non naturales, *i. things not naturall, being sixe, as followeth in order, as*

1 Ayre that doe inviron us, in which consider sixe things, *i.* the

- 1 The temperature of its owne nature is hot and moist,
- 2 Difference is of two sorts, *i.* { 1 good and temperate } to our bodies, { 2 evill and distemperate }
- 3 qualitie is altered by three things, *i.* by the
  - 1 Region either { 1 well } tempered. { 2 evill }
  - 2 winds being foure, as { 1 East is hot and dry attractive, 2 West, cold and moist expulsive, 3 South, hot & moist putrificative, 4 North, cold and dry retentive.
  - 3 wind is the body and spirits altered.
- 4 Situation of the place, as { 1 stony, cold, } and dry { 2 sandy, hot, } { 3 marish, cold, } { 4 woody, } hot { 5 fatty, } and moist,
- 5 body may alter by the ayre three wayes, *i.* by the
  - 1 qualitie in three sorts, *i.* by the { 1 region, 2 windes, 3 situation of the place.
  - 2 substãce, { 1 grosse and thicke, { 1 clowdy or troubly is worst, make the { 2 body fat and strong, { 2 wit dull and slow. { 2 pure and cleere, { 1 thinne is best, makes men { 1 lively and nimble, { 2 sharpe wits,
  - 3 sudden change, for nature cannot away with sudden changes.
- 6 Vtilities are these, it { 1 ingendereth the spirit animall, 2 is the matter of our respiration, 3 Author of { 1 life, 2 diseases, 3 death } to mortall men.

2 Meat and drinke herein consider six things, i. the

- 1 quantitie must be according to the
  - 1 substance either
    - 1 grosse and hard
    - 2 fine and easie
    - } of digestion.
  - 2 qualitie either
    - 1 hot,
    - 2 cold,
    - 3 dry,
    - 4 moist.
    - } moderate, or immoderate.
  - 3 Complexion of the eater, &c.
- 2 qualitie some
  - 1 are either
    - 1 hot,
    - 2 cold,
    - 3 dry,
    - 4 moist,
    - } and that either
      - temperately
      - meanly
      - extremely
      - } in degree.
  - 2 nourish
    - 1 much,
    - 2 little.
  - 3 make juice either
    - 1 grosse and thick,
    - 2 watry and thin,
    - 3 meane and temperate;
  - 4 be
    - 1 good,
    - 2 evill.
- 3 custome
  - 1 in feeding must be well regarded,
  - 2 it is like another nature,
  - 3 makes bad meats by use better to some, than better meats,
  - 4 of such meats and drinks as best like the eater, are oft best,
  - 5 if it must needs be left, doe it by little, in health, if it may be.
- 4 order
  - 1 eate
    - 1 not that first that should be last,
    - 2 first things that
      - 1 molifie and loose the belly,
        - 1 except it be loose,
        - 2 as
          - 1 broth,
          - 2 milke,
          - 3 reare Egges.
          - 4 all that properly loose
      - 2 be stiptick if you will bind a loose belly.
    - 3 not
      - 1 slippery meats first lest they hastily draw downe other meats undisgested.
      - 2 restrictives, lest they let the descending of other meats.
  - 2 Drinke.
    - 1 not till some thing be eaten at meales,
    - 2 the strongest first, and smallest after,
    - 3 moderately helps
      - 1 digestion
      - 2 to mingle the meat,
      - 3 the meat the better to passe its juyce
        - 1 Liver,
        - 2 Veines,
        - 3 Arteries, &c.
        - 4 Parts for to nourish.
- 5 Time in it observe three things, i. time of the
  - 1 age,
  - 2 yeare,
  - 3 day
  - } as in my golden Key you may observe.
- 6 Age
  - 1 children should
    - eat meat hot and moyst moderately,
    - drinke no wine it hurts them.
  - 2 young men
    - 1 may eat
      - 1 Sallets of coole herbs.
      - 2 Meats more
        - 1 colder,
        - 2 moister,
        - } and of grosser substance.
    - 2 must
      - drinke little Wine,
      - use all these moderately, fit to the
        - complexion,
        - exercise,
        - custome.
  - 3 Old folks must use meats
    - 1 hot and moist,
    - 2 easie to disgest,
    - 3 and [illegible]
    - } doe
      - 1 make the humours thin,
      - 2 purge and cleanse the blood by wine

Now of the ſecond part of the Theoricke, called Hygiena, *or* res non naturales, i. *things not naturall, being ſixe, as followeth in order, as*

1 Ayre that doe inviron us, in which conſider ſixe things, *i.* the

- 1 The temperature of its owne nature is hot and moiſt.
- 2 Difference is of two ſorts, *i.* { 1 good and temperate, 2 evill and diſtemperate } to our bodies.
- 3 qualitie is altered by three things, *i.* by the
  - 1 Region either { 1 well, 2 evill } tempered.
  - 2 winds being foure, as { 1 East is hot and dry attractive, 2 West, cold and moiſt expulſive, 3 South, hot & moiſt putrificative, 4 North, cold and dry retentive.
  - 3 wind is the body and ſpirits altered.
- 4 Situation of the place, as { 1 ſtony, cold, 2 ſandy, hot, } and dry; 3 mariſh, cold, 4 woody, 5 fatty, } hot } and moiſt,
- 5 body may alter by the ayre three wayes, *i.* by the
  - 1 qualitie in three ſorts, *i.* by the { 1 region, 2 windes, 3 ſituation of the place.
  - 2 ſubſtãce, { 1 groſſe and thicke, make the { 1 clowdy or troubly is worſt, 1 body fat and ſtrong, 2 wit dull and ſlow. 2 pure and cleere, makes men { 1 thinne is beſt, 2 { 1 lively and nimble, 2 ſharpe wits,
  - 3 ſudden change, for nature cannot away with ſudden changes.
- 6 Vtilities are theſe, it { 1 ingendereth the ſpirit animall, 2 is the matter of our reſpiration, 3 Author of { 1 life, 2 diſeaſes, 3 death } to mortall men.

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- 1 quantitie must be according to the
  - 1 substance either
    - 1 grosse and hard
    - 2 fine and easie
    - } of digestion.
  - 2 qualitie either
    - 1 hot,
    - 2 cold,
    - 3 dry,
    - 4 moist.
    - } moderate, or immoderate.
  - 3 Complexion of the eater, &c.
- 2 qualitie some
  - 1 are either
    - 1 hot,
    - 2 cold,
    - 3 dry,
    - 4 moist,
    - } and that either
      - temperately
      - meanly
      - extremely
      - } in degree.
  - 2 nourish
    - 1 much,
    - 2 little.
  - 3 make juice either
    - 1 grosse and thick,
    - 2 watry and thin,
    - 3 meane and temperate;
  - 4 be
    - 1 good,
    - 2 evill.
- 3 custome
  - 1 in feeding must be well regarded,
  - 2 it is like another nature,
  - 3 makes bad meats by use better to some, than better meats,
  - 4 of such meats and drinks as best like the eater, are oft best,
  - 5 if it must needs be left, doe it by little, in health, if it may be.
- 4 order
  - 1 eate
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    - 2 first things that
      - 1 molifie and loose the belly,
        - 1 except it be loose,
        - 2 as
          - 1 broth,
          - 2 milke,
          - 3 reare Egges.
          - 4 all that properly loose
      - 2 be stiptick if you will bind a loose belly.
    - 3 not
      - 1 slippery meats first lest they hastily draw downe other meats undisgested.
      - 2 restrictives, lest they let the descending of other meats.
  - 2 Drinke,
    - 1 not till some thing be eaten at meales,
    - 2 the strongest first, and smallest after,
    - 3 moderately helps
      - 1 digestion
      - 2 to mingle the meat,
      - 3 the meat the better to passe its juyce
        - 1 Liver,
        - 2 Veines,
        - 3 Arteries, &c.
        - 4 Parts for to nourish.
- 5 Time in it observe three things, i. time of the
  - 1 age,
  - 2 yeare,
  - 3 day
  - } as in my golden Key you may observe.
- 6 Age
  - 1 children should
    - eat meat hot and moyst moderately,
    - drinke no wine it hurts them.
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    - 1 may eat
      - 1 Sallets of coole herbs,
      - 2 Meats more
        - 1 colder,
        - 2 moister,
        - } and of grosser substance.
    - 2 must
      - drinke little Wine,
      - use all these moderately, fit to the
        - complexion,
        - exercise,
        - custome.
  - 3 Old folks must use meats
    - 1 hot and moist,
    - 2 easie to disgest,
    - 3 [illegible]
    - } doe
      - 1 make the humours thin,
      - 2 purge and clense the blood by wine

3. Repletion or fulneſſe in conſider generally theſe eight things in the

- 1 ſubſtance it is either
  - 1 aliment either
    - 1 profitable,
    - 2 hurtfull.
  - 2 ſpirits being either
    - 1 groſſe and thicke,
    - 2 thin, ſubtle and pure,
  - 3 humours either
    - 1 good,
    - 2 bad.
  - 4 Excrements being divers.
- 2 kinds are in 2 ſorts, i. in
  - 1 quantitie and in 2 ſorts, i.
    - 1 Aliment, and is alſo in two ſorts, as *Jacket a good*
    - 2 humours and in 2 ſorts, i. of
      - 1 *Plenitudo*, i. when all the humours abound equally in the
        - 1 Veines,
        - 2 Arteries.
      - 2 *Cacochymia*, i. when one humour alone abounded as
        - 1 Choler,
        - 2 Flegme,
        - 3 Melancholy, &c.
  - 2 qualitie the humours being either
    - 1 hotter,
    - 2 colder,
    - 3 thicker,
    - 4 thinner,
    - 5 ſalt,
    - 6 ſowre, &c.

    then is fit and are then called alſo *Cacochymiall*.
  - 1 *vaſa*,
  - 2 *vires*.
- 3 Differences
  - 1 univerſall
    - 1 all the body.
    - 2 poſſeſſing
      - 1 ſome part or members.
  - 2 particular.
- 4 Places divers according to the matter offending be it
  - 1 aliment,
  - 2 ſpirits,
  - 3 humours,
  - excrements.
- 5 cauſe is either
  - 1 generall either
    - 1 in the way of diſgeſtion.
    - 2 utterly forſaken of naturall heat, and ſo doe corrupt.
    - 3 humours being either
      - 1 *Plenitudo*,
      - 2 *Cacochymia*.
  - 2 particular, i. either of
    - 1 Spirits,
    - 2 Excrements.
- 6 Signes are according to the cauſe and diverſitie of fulneſſe.
- 7 cure muſt be
  - 1 according to the matter offending,
  - to the
    - 2 place offended, &c.
  - 3 fit evacuation, i. either
    - 1 generall,
    - 2 particular.
  - 1 *Plenitudo* by bleeding, &c.
  - 2 *Cacochymia*, by purges, &c.
- 8 accidents are divers according to the
  - 1 cauſe,
  - 2 place wherein it is contained, &c.

Now of Inanition or Emptineſſe.

3 Inanition, *i.* Emptineſſe, in it conſider theſe ſixe things, *i.* the

- 1 Definition, it is
  - 1 emptineſſe and lacke either of
    - 1 aliment,
    - 2 ſpirit,
    - 3 humour naturall, &c.
  - 2 a diminiſhing or let of any of thoſe eyther
    - 1 generall,
    - 2 particular.
- 2 kinds are either
  - 1 generall, where either
    - 1 all the body waxeth thin & weake, ſlender and empty.
    - 2 ſome particular part,
  - 2 particular,
- 3 Differences are generally two, *i*
  - 1 univerſall in all the body.
  - 2 particular in ſome part of
- 4 cauſes are either by
  - 1 nature, the body or member ſo made,
  - 2 Art ſo done, *i.* by
    - 1 purging,
    - 2 bleeding,
    - 3 ſweating, &c.
  - 3 accident as either by
    - 1 obſtruction either ſtopping the paſſage of
      - 1 vitall heat,
      - 2 nutritive, &c.
      - by excrement, &c.
    - 2 a fluxe either
      - 1 waſhing the naturall ſubſtance, &c.
      - 2 exhibiting the juyce nutritive, or the ſpirits from the place.
- 5 Signes are Atrophia, which is a
  - 1 waſting
  - 2 conſuming

  of the body or part, &c,
- 6 Cure is by
  - Removing the cauſe, *i.* A.
  - 2 reſtoring the loſt ſubſtance, &c. (if it may bee done.)

4 Sleepe and watch, in it conſider generally ſeven things, *i.* ſleepe.

1 what it is
- 1 ſleep is reſt and quietneſſe of the
  - 1 vertue animall, *i.* 1 ſence, and 2 motion.
  - 2 body and minde,
  - 3 ſpirits.
- 2 the image of death,
- 3 Deaths eldeſt brother, ſaith *Galen.*

2 the cauſe is
- 1 a ſweet vapour of nouriſhment ſent up to the braine,
- 2 the coldnes of the brain that turns thoſe vapors to humour which
  - 1 cloſe the conduits of the nerves
  - 2 ſtop the waies of the
    - 1 ſence,
    - 2 ſpirits,
  - 3 prohibit the ſpirits.

3 times of ſleep are generally 2. *i.* ſleep in the
- 1 day, chiefly after noon, is hurtfull to health, and utterly to be diſliked for the moſt part.
- 2 night, it fit to ſleep 7 or 8 houres, as cauſe requireth.

4 the manner of it is either,
- 1 long,
- 2 ſhort,
- 3 meane,

according to the
- 1 temperature of the body,
- 2 diſeaſe and time of it,
- 3 cuſtome.

5 the differences are generally two, *i.* the
- 1 moderate,
- 2 immoderate,

whoſe effects are ſhewed in my golden key.

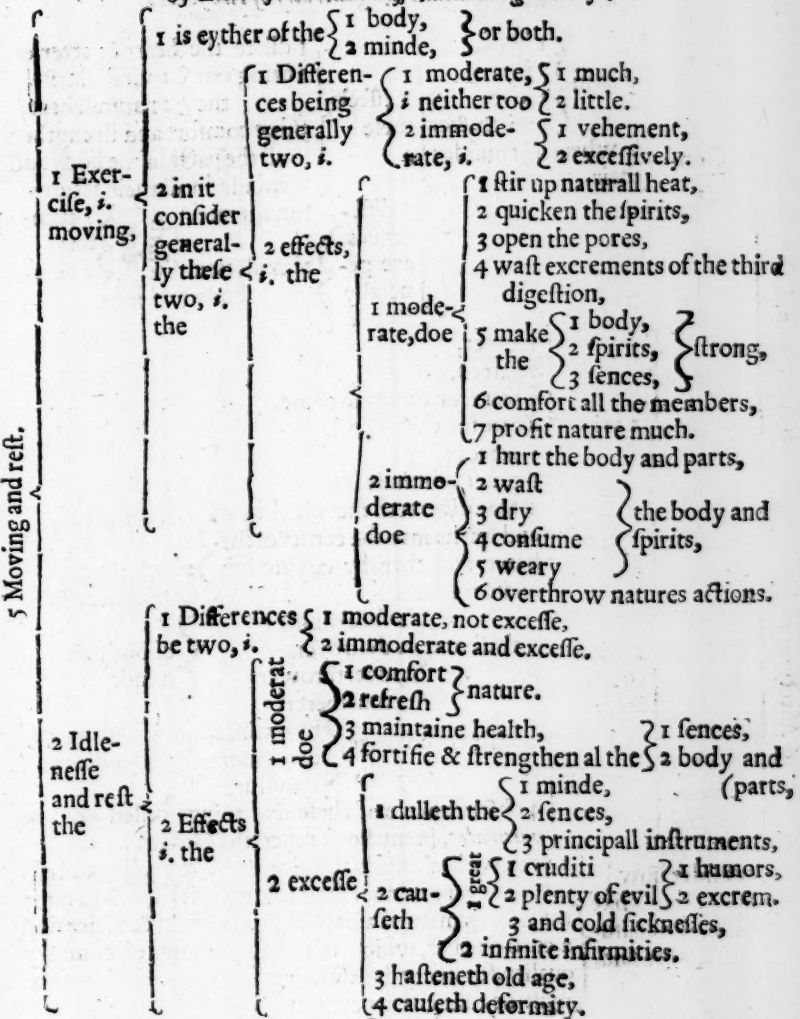
6 and watch the utilities, theſe two being
- 1 fitly uſed, comfort much,
- 2 moderately uſed, they
  - 1 refreſh
    - 1 the memory and al the ſences
    - 2 chiefly the
      - 1 ſpirits,
      - 2 animall faculty.
  - 2 quicken and refreſh the ſpirits,
  - 3 helpe digeſtion,
  - 4 expell excrements, &c.

7 or watch the Hurts of either of theſe abuſed as immoderate,
- 1 watch
  - 1 makes giddy braines,
  - 2 ingenders rheume,
  - 3 poſtmes,
  - 4 troubles the ſpirits,
  - 5 cauſes rawneſſe and crudities,
  - 6 idle braines and idiots, &c.
- 2 ſleep
  - 1 dulleth the ſences,
  - 2 cauſe much ſuperfluous excrements,
  - 3 makes groſſe ſpirits in
    - 1 old folkes,
    - 2 children,
  - 4 it retaines excrements,
  - 5 it fils the braines with crudities.

Looke more of theſe in my Golden Key.

Of

Of Exercise and Idleneſſe, i. moving and reſt.



6 Affections of the minde are generally two, *i.*

1 Content,
- 1 as in: 1 hope, 2 joy, 3 love, 4 mirth, &c.
- 2 wherein consider their
  - 1 effects these:
    - 1 dilate the heart & arteries,
    - 2 bring out the: 1 vitall spirits, 2 naturall heat.
    - 3 doe comfort and strengthen all the parts of the body and minde, in all their actions.
  - 2 differences are generally two, *i.*:
    - 1 moderate, which doe: 1 comfort, 2 hurt body and minde.
    - 2 immoderate,

2 Discontent,
- 1 as in: 1 anger, 2 hatred, 3 feare for things to come, 4 care for things past, 5 sorrow, 6 griefe of minde, &c.
- 2 whose effects are, *i.*
  - 1 that diverteth the vitall heat and spirits into the center of the heart, and thereby consumeth and dryeth the: 1 vitall spirits, 2 body, & causeth leaneneſſe
  - 2 these are the: 1 forerunners, 2 destroyers, 3 overthrowers, 4 murtherers of body and minde
  - 3 hastners of: old age, death, by extinguishing and drying, or consuming vitall heat and moysture.
  - 4 observe more of these sixe things called *res non naturales*, in my book called the Golden Key.

consider how to use these sixe things not naturall, before said, both to
- 1 preserve health, which is done by like quality and nature, for every thing is maintained by its like, & so must the 7 things natural aforesaid be preserv'd & maintaind
- 2 cure diseases, which is done by things of contrary quality, for every disease being a thing against nature, must be cured by its contrary.

Of

Of the third part called Pathologia, i. res contra natura, i. *things against nature, being generally three, as followeth.*

3 Part. Things against nature are generally 3. *i.* the

- 1 disease being of three sorts, *i.*
  - intemperary of the similar parts in
    - 1 quãtity being either too
      - 1 much,
      - 2 little,
    - 2 quality being either too
      - 1 hot,
      - 2 cold,
      - 3 dry,
      - 4 moist,
  - 2 evill confirmation, this hurts organicks in
    - 1 figure,
    - 2 number,
    - 3 magnitude,
    - 4 situation.
  - 3 solution of unitie in both,
    - 1 simple and organick parts.
- 2 Cause being three, *i.*
  - 1 primative, *i.*
    - 1 outwards, as
      - 1 wounds,
      - 2 contusions,
      - 3 fractures,
      - 4 dislocations, &c.
    - 2 or by some outward hurt or meanes.
  - 2 Antecedent, *i.* of evill humors, &c. being either
    - 1 hereditaries, *i.* bred in the mothers womb, by some infection, &c. from the parents, or weakness, or ill forme of some part or member.
    - 2 after the birth by
      - 1 evil dyet, disorder, &c
      - 2 accident or abuse, &c.
  - 3 Conjunct, which appeareth after the collection of the matter offensive, in some part or member, & never else, & is ever present in the body or part offended.
- 3 Accidents or symptomes
  - 1 are called *Insulsum, i.* a bragge or reproach of the whole body, or part, saith *Jerimeus Thriverius*.
  - 2 doe follow the disease, as the shadow doth the body
  - 3 doe offend 3 waies, wherein the actiõ is either
    - 1 abolished
      - 1 hurting the quality either by vehement
        - 1 heat,
        - 2 cold,
      - 2 any accident or cause.
    - 2 changing
      - 1 the natural heat into inflãmation,
      - 2 scabs into lepra, &c.
    - 2 diminished. 3 depraved or wholly lost.

Of the fourth part called Semotica, i. *the judging part or judiciall part, i the Prognosticke part.*

This fourth part how to judge of diseases,

- 1 what
  - 1 they be
    - 1 hot,
    - 2 cold,
    - 3 simple,
    - 4 compound,
    - 5 infectious or not,
    - acute or coronicke.
  - 2 nature they be of either
  - 3 danger,
  - 4 cure,
  - } or none like to follow.
  - 5 time of cure long or short.
  - 6 the cause is and to prove that it is either
    - 1 to be cured, and by what meanes,
    - 2 not to bee cured, and the reason why.
  - 7 medicines in quality & operation are fit to be used.
- 2 whose judgements are taken generally of foure things, i. of the
  - 1 Disease it selfe,
  - 2 Nature of the part,
  - 3 Symptomes or accidents,
  - 4 Excrements voyded by nature.

Note that these foure parts aforesaid, are the contemplative parts of this thrice worthy faculty of curing, which ought to be first exactly knowne of any professor herein, before hee enter into the practicke part: for upon these foure pillars, was this worthy art built, and is as necessary to the Artist, as the head to the body: for as the body that hath all other members, and wanteth the head, can doe nothing for want of knowledge, so it is with the Artist that wanteth these foure Theoricke parts, which in him are required: for he is ever ready to mayme, kill, or spoyle his unfortunate Patient, that enters under his hands, sooner than to help or cure him, for lacke of the knowledge of these foure parts afore mentioned.

Of the Therapeuticke, i. the practicke part, being the second generall part of Chirurgery, of some called the fifth or curatiue part.

2 Part, Theraputica, or Practica, *i.* practise.

- 1 sheweth the
  - 1 method
  - 2 manner or way

  of curing diseases.
- 2 is triple, that is,
  - 1 dyet, *i.* the right use of the 6 things not naturall.
  - 2 Pharmacopia, *i.* the use of medicine eyther
    - 1 inwards,
    - 2 outwards.
  - 3 manuall operation, *i.* hand working.

Note ever, where one of these three will serve, use no other.

All operations agreeable to the rules of the Theoricke part aforesaid, which the skilfull Artist must follow effectually in his practise.

These unfortunate people that seeke to the unskilfull for cure of their infirmities, may wel be compared to a foolish man, who having a garment to make, will not put it to a Taylor to do it, but to a Smith or a Carpenter to make it, and though it be not his profession, yet peradventure for lucre of gaine, he will undertake to doe it, but how well (every man of judgement may conjecture) but now commonly, most people in these our dayes, seeme to have more care of making their garments, than the cure of their maladies. To make a garment, they will looke out the best workman, but to cure their infirmities (though it stand on life or limme to be lost,) they as soone chuse a sillie woman, or an ignorant fellow (chiefly if they have gotten a little applause of the vulgar) before the learned and skilfull Artist, and why? because those idle brained wretches that neither feare the wrath of God, nor make conscience of their waies, will not onely adventure, but make sure promises to cure any that they take in hand, though it be unpossible to be cured by the art or skill of man; for how can they foreshew the danger, that know it not, but to get money? and some thinking to get praise of others for their worke, will undertake any cure, so bold and impudent are they, yet neither know the disease, nor any perfect way to cure it, but as the blinde man shot the Crow; but the more unwise those that employ them, as woful experience daily sheweth too much, and were perfect knowledge herein gotten so lightly, as these Ignorants seeme, then vainly were all those great volumes made, and so great study employed thereon.

promise no more than you may with a good conscience performe, and consider

1 That health lyeth not in thy hands to give, therefore promise and performe onely thy painefull diligence and industry.

2 There belongeth to every cure generally, these foure things, *i.* the
- 1 Determination of God,
- 2 Good industry and skill of the Artist,
- 3 Honest act of the Apothecarie,
- 4 Obedience and good usage of the Patient.

3 Of these foure parts abovesaid, there is but one in thy hands to use, or two at the most.

4 The end of this worthy art is eyther to
- 1 preserve,
- 2 cure,

so farre forth as art and nature may afford.

Foure

Foure speciall things to be considered of every man that will practise this famous worthy art of medicine.

These are the foure things to consider, *i.*

1 First, let your honest manners be equall to your excellent knowledge, therefore be
- 1 faithfull
- 2 true
- 3 trusty
  } to your diseased Patient.
- 4 honest,
- 5 sober
  } of life and conversation.
- 6 comfortable in words,
- 7 not deceiveable in deeds,
- 8 ever serving of God, love and pray unto him daily for his grace and assistance, and consider the end wherefore thou art called to use this worthy faculty, it is not onely for thine own gaine, as too too many do now abuse it, but you ought with all diligence to search out the secrets of nature, and endeavour chiefly hereby to stir up Gods glory, shewing his great goodnesse towards us, by comforting and curing the sore, sicke, and diseased people.

2 Before you take charge, foresee these six things, *i.* whether it be
- 1 honest before God and man,
- 2 profitable to the Patient,
- 3 easie
- 4 hard
- 5 possible,
- 6 impossible
  } to be done, and the reasons how and why it may, or may not bee done,

3 to admonish and urge the Patient to observe the three conditions of a Patient, *i.* to
- 1 hope with assurance,
- 2 obey with diligence,
- 3 endure with patience, consider also that medicine was not ordained for disorderly persons, saith *Hippocrates*.

4 There be three causes why you should refuse the cure, *i.* where the
- 1 disease is uncurable by its own nature, or the party so weak, that he cannot endure fit remedies.
- 2 cure of one disease causeth a worse.
- 3 Patient is disobedient, and wil not observe fit order in all things as is requisite for the cure, for medicine, saith *Hyppocrates* in his Aphorisme, was not ordained for disorderly and disobedient persons.

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Briefe instructions for the Artist to consider, being called to a Patient, both generally and particularly.

First when thou seest the Patient, consider well

- 1 generally two things, *i.* what is
  - 1 done,
  - 2 to be done.
- 2 particularly these eight things, *i.* to know perfectly the
  - 1 disease whether it be eyther a
    - 1 tumour against nature,
    - 2 wound,
    - 3 ulcer,
    - 4 fracture,
    - 5 dislocation, &c.
  - 2 kinde, *i.* whether
    - 1 simple,
    - 2 compound.
  - 3 Differences wherein they differ the one from the other.
  - 4 causes *i.* whether
    - 1 primitive,
    - 2 antecedent,
    - 3 conjunct.
  - 5 Signes,
    - 1 generall,
    - 2 particular.
  - 6 Prognostication what is like to follow, *i.*
  - 7 Accidents that follow the disease as the shadow doth the body.
  - 8 cure, in which consider the
    - 1 perspectation, *i.*
      - 1 what must be done first, and so to proceed, *s. A.*
      - 2 to foresee what may crosse your cure, & how to prevent it.
    - 2 intentions fit to use in
      - 1 dyet,
      - 2 preperation of the matter,
      - 3 evacuation,
      - 4 corroboration,
      - 5 preventing or removing of accidents,
      - 6 cure at all times,
      - 7 manuall operation.

Of

Of Tumors in generall being but three.

Tumors in generall be three, *i.*

1 according to nature, as the
- 1 balles of the cheeke,
- 2 brawnes of the
  - 1 armes,
  - 2 legges, &c.
- 3 muscles, &c.

2 Aboue nature which
- 1 causeth deformity onely,
- 2 hurteth not the action, use, nor office of the member, but can doe things without let or hinderance.

3 against nature, are generally three, *i.*

1 *Humoralis* being generally two, *i.*
- 1 simple be generally two, *i.*
  - 1 hot being two,
    - 1 Phlegmon, of bloud,
    - 2 Erisypilas, of choler.
  - 2 cold, being 2,
    - 1 Oedema, of flegme,
    - 2 Scirrus, of melancholy.
- 2 Compound of many humors mixt together, being generally two,
  - 1 equall when
    - 1 when all foure humors be equally mixt,
    - 2 two are equally mixt,
  - 2 unequall, as two parts of one, and but one part of another.

2 *Flatuosus*, *i.* a windy tumor of spirits or vapours, as are
- 1 Timpanites,
- 2 Priapismus,
- 3 Hernia Ventosa, &c.

3 *Varicosus* is sometimes of
- 1 Spirits,
- 2 humours,
- 3 both spirits and humours.

Now of the ſeverall branches that ſpring of the tumors aforeſaid.

From

1 Phlegmon ſpringeth theſe ten branche following, *i.*
- 1 Phygithlon, *i.* Emunctory tumors inflamed,
- 2 Bubo, tumor of the groyne inflamed,
- 3 Phyma, a hot puſh, as a Fungus,
- 4 Pornuculus, a felon or whitflowe,
- 5 Antrax, a Carbuncle,
- 6 Gargareon, uvula inflamed,
- 7 Pariſthma, Tonſilla inflamed,
- 8 Anuriſma, an artery delated,
- 9 Gangrena, an inflammation not mortified,
- 10 Sphacelus, mortification confirmed.

2 Eriſypelas, ſpringeth theſe 5 branches following, *i.*
- 1 Herps { 1 Miliaris, 2 Excedence, 3 Formica, } *i.* puſtles that eat.
- 2 Phlictene, bliſters,
- 3 Epinyctides, blew puſtles,
- 4 Hydrea, puſtles, *i.* night galls,
- 5 Dracunculus, crimſon veynes.

3 Oedema, whoſe branches are nine, as followeth, *i.*
- 1 Atheroma, a ſoft tumor of the head, &c. with matter like oatmeale or pap, without paine.
- 2 Steatoma, with matter like greaſe, with hardnes, *i.* Napta,
- 3 Meliceris *i.* great ſoftned, with gravelly hard matter,
- 4 Hydrocele, Hernia aquoſa, or humoralis,
- 5 Aſcites, a hot dropſie,
- 6 Leucophlegmata, a cold dropſie,
- 7 Chyradis, Scrophulus, the Kings evill,
- 8 Bronchocele, *i.* Bocium, a great tumor about the throat,
- 9 Hydrocephalea, a watry tumor in a childes head.

4 Scirrhus, whoſe branches are ten, as followeth, *i.*
- 1 Cancer, *i.* an unequall hard tumor, *i.* of 2 ſorts, *i.* { 1 Occultus, 2 Vlceratus } with { 1 out, 2 an } ulceration,
- 2 Elephantiaſis lepra, *i.* an univerſall Cancer,
- 3 Pſora, dry ſcabs, itch, and is not lepra.
- 4 Enchymoma, contuſions, *i.* blacke and blew,
- 5 Varices, ſwolne veynes,
- 6 Sarcocele, Hernia Carnoſa, fleſh growing to the teſticle,
- 7 Polypus, ſpungy fleſh growing in the noſe,
- 8 Verruca, warts, { 1 Acrochordonis, hangs by a threed, 2 Myrmeciæ, broad, alow, ſharpe, above,
- 9 Cornua, { Corus and hard Callus on { 1 feet, 2 hands, } with labour.
- 10 Calbo,

From
- 5 Flatus as is before mentioned with many more.
- 6 Varicosus, whose branches are fourteen, i. as
  - 1 Vitilig. i. morphew,
  - 2 Exanthemata, i small poxe or measels,
  - 3 Parotides, tumors behind the eares,
  - 4 Mentagra, i. scabs on the chin,
  - the 5 ruptures
    - 5 Entercole omentum, i. the carle } fals down into Scrotum,
    - 6 Epilocele, the testicle
    - 7 Enteroepiplocele, when both
    - 8 Bubonocele, a tumor of the flanke,
    - 9 Exomphalos, a tumor of the navell.
  - 10 Arthritis, all gouts,
  - 11 Chiragra, hand gout,
  - 12 Sciatica, huckel bone gout,
  - 13 Genugra, knee gout,
  - 14 Podagra, feet gout, &c.

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  - 13 Genugra, knee gout,
  - 14 Podagra, feet gout, &c.

A wound is solution of unitie new, bloudy without matter or putrifaction, whose difference is generally taken of three things, i of the

- 1 nature of the part hurt being either
  - 1 simple
    - 1 soft in the parts,
      - 1 flesh,
      - 2 fat, &c.
    - 2 hard, i. in
      - 1 bones,
      - 2 joynts, &c.
    - 3 meane, as
      - 1 veynes,
      - 2 arteries,
      - 3 tendons, &c.
  - 2 organicks which are three, i.
    - 1 principals, i. the
      - 1 braine,
      - 2 heart,
      - 3 liver,
      - 4 testicles,
    - 2 servants to these principals are
      - 1 veines,
      - 2 arteries,
      - 3 nerves,
      - 4 vessels spermaticke
    - 3 proper to themselves, as
      - 1 belly,
      - 2 kidneys,
      - 3 matrix, &c.
- 2 the wound it selfe is eyther
  - 1 simple without & healed by the first intentiõ, i cõglutination,
    - 1 losse of substance,
    - 2 accident,
  - 2 compound
    - 1 with accidents, as
      - 1 lost substance,
      - 2 contusion,
      - 3 dolour,
      - 4 tumor,
      - 5 inflammation,
      - 6 convulsion, &c.
    - 2 requires intentions to cure it
- 3 differences are divers, some are
  - 1 great,
  - 2 little,
  - 3 easie to cure,
  - 4 dangerous,
  - 5 mortall, &c.

the utilities by the perfect knowledge of these above said things, we have foure speciall utilities, for thereof is taken the

- 1 Prognostication,
- 2 intentions curative,
- 3 invention of fit medicine
- 4 perfect manner of applying of medicines most fit.

Of

An Vlcer is solution of unity, with matter differing in substance, and every Vlcer is eyther

- 1 simple without accidēts
- 2 compound, without accidēts

whose names and differences are taken of five things generally, either of the

1 disease being either
- 1 simple,
- 2 compound.

2 cause being either
- 1 primitive,
- 2 antecedent,
- 3 conjunct,

3 kindes which are divers, as
- 1 plaine,
- 2 hollow,
- 3 fistulous,
- 4 filthy,
- 5 sanious,
- 6 virulent,
- 7 cancrous,
- 8 corrosive,
- 9 putrifactive, &c.

4 Sanies eyther
- 1 good,
- 2 evill,

5 accidents as with
- 1 dolour,
- 2 tumour,
- 3 inflammation,
- 4 induration,
- 5 Callus,
- 6 evill flesh,
- 7 hard lippes,
- 8 distemper,
- 9 varices,
- 10 wormes,
- 11 bones corrupted, &c.

Of

Every Fracture of the bone is either
- 1 simple without any other malady, and are generally three, either it is
  - 1 rift, that cleaveth the bone long wise,
  - 2 overthwart, broken short off,
  - 3 oblique, whose sharpe ends hurts the flesh, and causeth dolour, &c.
- 2 compound, either with
  - 1 a disease, as with
    - 1 a wound,
    - 2 contusion,
    - 3 gangrena,
    - 4 a mortifying tumor, &c.
  - 2 accidents, as with
    - 1 dolour,
    - 2 itch,
    - 3 inflammation,
    - 4 tumor,
    - 5 hard legature, &c.

1 hard to cure, are these in
- 1 old folkes because they be 2 cholericke persons
  - 1 hard,
  - and
  - 2 dry,
- 3 the ribs with
  - 1 inflammation,
  - 2 spitting of bloud,
- 4 joynts and heads of the bones,
- 5 the scull, how little soever be dangerous,
- 6 which
  - 6 be many broken pieces,
  - 7 is a wound because of the binding,
- 8 bones with much marrow.

Consider Fractures
- 2 easier and lesse dangerous to cure, are all simple fractures of the
  - 1 ribs,
  - 2 middle of the bones of the
    - 1 armes,
    - 2 legges,
    - 3 fingers, &c.
  - 3 yonger, soft, and moist persons.

3 joyne in
- 1 the
  - 1 head in 35
  - 2 thigh in 45
  - 3 legs, 3 arms } in 40
  - 4 nose in 16
  - 5 ribbes
  - 6 jawes
  - 7 shoulder
  - 8 cannell } in 20
  - 9 hands
  - 10 feet

  } dayes,
- 2 all according to the nature of the
  - 11 hanch and point of the shoulders in forty daies,
  - 1 bone, 2 age, 3 aire or region, 4 time, constit. &c.

Every dislocation is eyther

- 1 simple, and is either
  - 1 perfect, *i.* an absolute Dislocation.
  - 2 imperfect, *i.* a luxation not altogether out, *i.* either the
    - 1 wrench is
      - 1 forwards,
      - 2 backwards,
      - 3 side waies.
    - 2 ligaments,
    - 3 tendons,
    - 4 nerves,

    be over stretched or broken,
- 2 compound, and is either
  - 1 perfect,
  - 2 imperfect

  then is the bone displaced eyther with
  1 Dolour,
  2 Tumour,
  3 Wound,
  4 Fracture,
  5 Contusion,
  6 Induration, &c.

Now having briefly discourſed both of the Theoricke and practicke parts of Surgery, I will briefly touch ſome other needfull things for the Artiſt not onely to know, but alſo to be very expert in the uſe thereof.

The three operations of the Surgion aforeſaid, *i.* to
- 1 ſeperate things hurtfull.
- 2 joyne things divided,
- 3 reduce things diſplaced

in theſe operations, conſider theſe ſixe things, *i.* to worke
1. ſafely, without hurt,
2. ſpeedily, not detracting time,
3. eaſily, with little paine as may be.
4. Doing as you would bee done to in the like caſe.
5. for competent reward, and not onely for lucre, ungodly.
6. not warranting the cure, but flye uncurable things as much as may be; promiſe no more than art may performe, and performe that faithfully.

To perform theſe aboveſaid three things the better, hee muſt know the perfect manner and exact waies to accompliſh his intent, both in
1. things
   1. medicinall,
   2. manuall as follow.
2. ſtitching of wounds,
3. fit ligature or rollings.
4. making of
   1. tents,
   2. ſplints,
   3. ſtupes,
   4. bolſters, &c.

Inſtruments

Instruments and meanes in generall which be in common use to work by manuall operation to accomplish this great work in Surgery, are 11. as

- 1 stitches are generally three, as
  - 1 conglutinate, or incarnative
  - 2 compressive,
  - 3 reservative.

  are five in particular.
- 2 Tents, whose sundry sorts are eight.
- 3 Bolsters, whose sundry sorts are sixe.
- 4 ligatures be three sorts, *i.*
  - 1 conglutinate or incarnative,
  - 2 expulsive,
  - 3 retentive.
- 5 bleeding artificiall be generally foure, as
  - 1 Phlebotomy to open a veine,
  - 2 Arteriatonica to open an artery,
  - 3 Ventose with scarification,
  - 4 Sanguigium or horseleaches applyed.
- 6 Cetous,
- 7 Cauteries are two, *i.*
  - 1 active by fire,
  - 2 potentiall by burning medicines.
- 8 Bathes are generally two, *i.*
  - 1 naturall,
  - 2 artificiall.
- 9 Frications are three sorts, *i.*
  - 1 soft,
  - 2 hard,
  - 3 meane.
- 10 Sweats are generally of two sorts, *i.*
  - 1 naturall,
  - 2 artificiall.
- 11 To doe all the operations with all its instruments, the
  - 1 medicinals are generally 11. *i.*
    - 1 Anodines,
    - 2 Repercussives,
    - 3 Attractives,
    - 4 Resolutives,
    - 5 Mollificatives,
    - 6 Suppuratives,
    - 7 Mundificatives,
    - 8 Incarnatives,
    - 9 Conglutinatives,
    - 10 Corosives,
    - 11 Cicatrizatives.
  - 2 manuals, under which is comprehended the use of his
    - 1 Instruments in generall, *s.* A.
    - handy work, *i.* to
      - 1 reduce
        - 1 fractures,
        - 2 dislocations.
      - 2 separate things hurtfull,
      - 3 joyne things divided,
      - 4 use frications, &c.

Now

Now to begin with ſtitches, tents, bolſters, &c. and ſo to proceed in order as they are before mentioned, a briefe touch of them all as followeth.

Stitches in generall are of three ſorts, ſo named by their effects, as

- 1 Conglutinative, and is of five ſorts, *i.* the
  - 1 firſt, ordinary in wounds, thus,
  - 2 ſecondly, with the Needle left in the place, as in ſtitching the hareſhorne lippe, &c. with the threed wound about the needle, thus,
  - 3 thirdly, with quils or leather, &c.
  - 4 fourthly with hookes,
  - 5 fifthly, the dry ſtitch.
- 2 compreſſive is
  - 1 that ſtitch which Skinners uſe,
  - 2 uſed to
    - 1 ſtop great fluxe of bloud,
    - 2 wounds of the
      - 1 guts,
      - 2 panicles, &c.
- 3 Reſervative, *i.*
  - 1 as other ſtitching, but not drawne ſo ſtraight together as the other.
  - 2 good in wounds,
    - 1 rend,
    - 2 torne,
    - 3 ruptured, &c.

Alſo there bee other ſtitchings wherein I referre you to the beholding of the cunning doer of them, with many of the aboveſaid alſo.

conſider in ſtitches theſe three things, *i.* the

- 1 Divers ſorts of them,
- 2 Divers manner of their doing,
- 3 utility which is eyther to
  - 1 unite,
  - 2 retaine.

of

Of tents, when, how, and to what end they are used, whereof they are made, and of their divers formes.

- Tents, of which consider generally these foure, *i.* they
  - 1 serve to eight sundry uses, *i.* to wounds,
    - 1 Deep, to enlarge and mundifie,
    - 2 needfull to keepe open,
    - 3 with filthy matter, altered by the ayre, &c.
    - 4 contused,
    - 5 bitten,
    - 6 rend,
    - 7 venemous,
    - 8 & 9 & 10 sores where the bone must be handled, fistulaes, sores that must be kept open.
  - 2 are made, some of
    - 1 soft old linnen cloth,
    - 2 tow, cotton, flaxe, wooll, &c.
    - 3 gold, 4 silver, 5 lead, hollow,
    - 6 spunge,
    - 7 eldern pith,
    - 8 gention roots, &c.
  - 3 are of divers forms, *i.*
    - 1 some are as need requireth.
      - 1 long,
      - 2 short,
      - 3 bigge,
      - 4 little,
      - 5 hollow,
      - 6 massive,
    - 2 all are taper wixt, the better to enter in.
  - 4 are applied sometimes
    - 1 dry, 1 unguents, 2 waters, 3 powders, &c.
    - 2 dipt in

consider of tents generally these foure things, *i.* their

1. substance whereof they are made,
2. formes,
3. manner of application,
4. sundry uses as abovesaid, being eight.

Bolsters they are

- made either of
  - 1 flaxe or tow,
  - 2 cotton,
  - 3 wooll,
  - 4 fine linnen
    - 1 cloth,
    - 2 ragges,
  - 5 sponge.
- 2 for the most part of sixe sorts, which take their names of their uses, as bolsters,
  - 1 retentive to stop bloud,
  - 2 conglutinative, or incarnative,
  - 3 expulsive,
  - 4 restrictive,
  - 5 confortative,
  - 6 conservative.
- 3 applyed, some,
  - 1 wet,
  - 2 dry.
- 4 some to
  - 1 compresse the member divided,
  - 2 nourish
  - 3 conserve
    - naturall heat,
  - 4 keepe the member from paine of rolling, &c.
- Consider in bolsters these foure things, i. their
  - 1 substance,
  - 2 sixe sorts,
  - 3 manner of application,
  - 4 sundry utilities.

of

Lygatures or Roulings are of three sorts, *i.*

1 Conglutinative or Incarnative, used in { 1 greene wounds, 2 fractures, &c.

2 Expulsive used in hollow { 1 Apostomes, 2 Wounds, 3 Old ulcers, 4 Fistulaes, &c.

3 Retentive, being common, used onely to keepe on medicines, being applyed, &c.

herein consider five things, *i.* the

1 substance { 1 woollen, 2 linnen, &c.
2 length,
3 breadth,
4 sort which is best for your purpose,
5 manner of doing it,
6 utilities, &c.

Of

Bloud is evacuated generally three waies, *i.* either by

- 1 nature, as by
  - 1 Menstrua,
  - 2 Hemoroyds.
- 2 Art, done either by
  - 1 Phlebotomy, *i.* opening a veine,
  - 2 Arteriatomia, *i.* opening an artery,
  - 3 Ventose, with scarification,
  - 4 Leaches or bloud-luckers applyed.
- 3 Accident, as by eruption by
  - 1 nose bleeding,
  - 2 vomit, } of bloud.
  - 3 spitting, }
  - 4 Dissenterie, or bloudy flixe,
  - 5 pissing of bloud,
  - 6 Varices,
  - 7 Anurisma, or ruption of an arterie,
  - 8 Erosion in ulcers, &c.
  - 9 Wounds,
  - 10 Divers other casuall meanes.

Note that we bleed eyther by

1 Evacuation, *i.* to bleed abundantly,

2 Eventation, when humours boyle and bubble in the veynes by evill quality, and done by little at once to vent the vapours.

3 Revulsion, to divert or plucke backe, or opposite the humour to the opposite part in full bodies, &c.

4 Derivation, derive the matter from one part to another, flowing before it bee fully setled or congealed, as in Plurisie, &c.

Of Phlebotomy, with divers obſervations to it belonging, it is an artificiall inciſion of veynes.

The Artiſt that muſt be admitted to let bloud, muſt

1 ſharpe ſighted,
2 ſteady, ſtrong, and nimble handed,
3 much uſed to this operation,
4 furniſhed with things neceſſary, as
- 1 good
  - 1 launcets,
  - 2 flemes, &c.
  - 3 ligatures.
- 2 bands,
- 3 cotton, *i.* lint,
- 4 bolſters,
- 5 reſtrictives to ſtop bloud, &c.

5
2 know perfectly the
6
7
8
- 5 number of veines uſually opened, which are thirty nine, *i.* in the
  - 1 head 15
  - 2 armes 6
  - 3 hands 6
  - 4 fundament 4
  - 5 legs 8
- 6 true place of the veynes, that he miſtake not.
- 7 right way to open them, which differ according to the
  - 1 place, either
    - 1 little,
    - 2 great,
    - 3 deep or aparent.
  - 2 veynes, either
  - 3 bloud, eyther
    - 1 thinne,
    - 2 groſſe.
- 8 manner how to doe it, *i.*
  - 1 firſt,
  - 2 ſecondly, to make
    - 1 frication,
    - 2 ligature,
  - 3 thirdly, the vein being found, ſtirre it with your thumb or finger, that it ſlip not, then open it, *ſ.* A.
  - 4 fourthly, after the evacuation,
    - 1 remove your ligature,
    - 2 cloſe with wound,
    - 3 apply your lint & bolſt.
    - 4 then binde it up, *ſ.* Ar.

9 never let bloud without the counſell of the learned Phyſitian, and doe it as he appointeth, *i.*
- 1 open the right veine,
- 2 draw the juſt quantity of bloud, if poſſible.

10 obſerve theſe three orders very diligently, what is to be done,
- 1 before,
- 2 at the preſent time of bleeding.
- 3 after

The Artist that giveth counsell to let bloud, must consider that it is done with an intent

- 1 generally eyther to
  - 1 preserve health,
  - 2 remove diseases,
- 2 particularly eyther to
  - 1 Evacuate,
  - 2 Draw out,
  - 3 Restraine,
  - 4 Alter,
  - 5 Disburthen nature,

in which hee must consider in all persons, these eight things following, *i.* as

1 *Age*

The

1 Age, if to { 1 preserve, doe it not to { 1 children before fourteen, 2 old folks after seventy } yeares old,
2 remove diseases, doe it to all ages, &c. A.

2 Strength, if { 1 strong, bleed largely,
2 weake, bleed more sparingly,

3 Habitude if { 1 good, with great veines, bleed largely,
2 ill, bleed lesse.

4 Country, if { 1 hot, 2 cold, } bleed the { 1 more, 2 lesse.

5 time, if to { 1 preserve, doe it in the Spring, chiefly in the morning,
2 cure sickenesse, doe it at all times when need is, &c. A.

6 Custome, being done either to { 1 prevent some disease, 2 avoyd excrements that hinder health, as { 1 menstrua, 2 Hemoroyds, &c.

7 Signes and rules of astronomy, are of some { 1 observed, 2 omitted chiefly of the most learned, 3 nay, of all in extremity neglected.

8 orders to be observed are generally three, as how to use the Patient. { 1 before, 2 at the present time, 3 after } bleeding, followeth

Before bleeding, consider generally these eight things, *i.*

1 first, who may { 1 bleed, 2 not bleed.

2 why we bleed, it is for two causes, either to { 1 preserve health, & prevent sicknes 2 cure diseases.

3 foure waies to bleed, it is done eyther byl { 1 evacuation, 2 eventation, 3 revultion, 4 derivation, } to empty { 1 much, 2 i ttle, 3 and draw backe, 4 neere hand.

4 foure things put backe bleeding for a time, till they be remedied, { 1 cruditie in the { 1 stomacke, 2 veynes. 2 Compaction of filthy humours, hurtfull in any part, 3 Costiveneſſe with dryed excrements, 4 weakeneſſe of the mouth of the stomacke.

5 that Egestion be voyded before bleeding.

6 The strength { 1 of the party, either { 1 strong, 2 weake. 2 to consider thereby the quantity fit to draw.

7 The veynes if it { 1 appeare not, how to helpe it, 2 be small, bleed after meat, ſ. A.

1 Also have all needfull things for your use, ready in place before you begin.

What

What is required at the present time of bleeding, there is required in the Artist and Patient, generally two things.

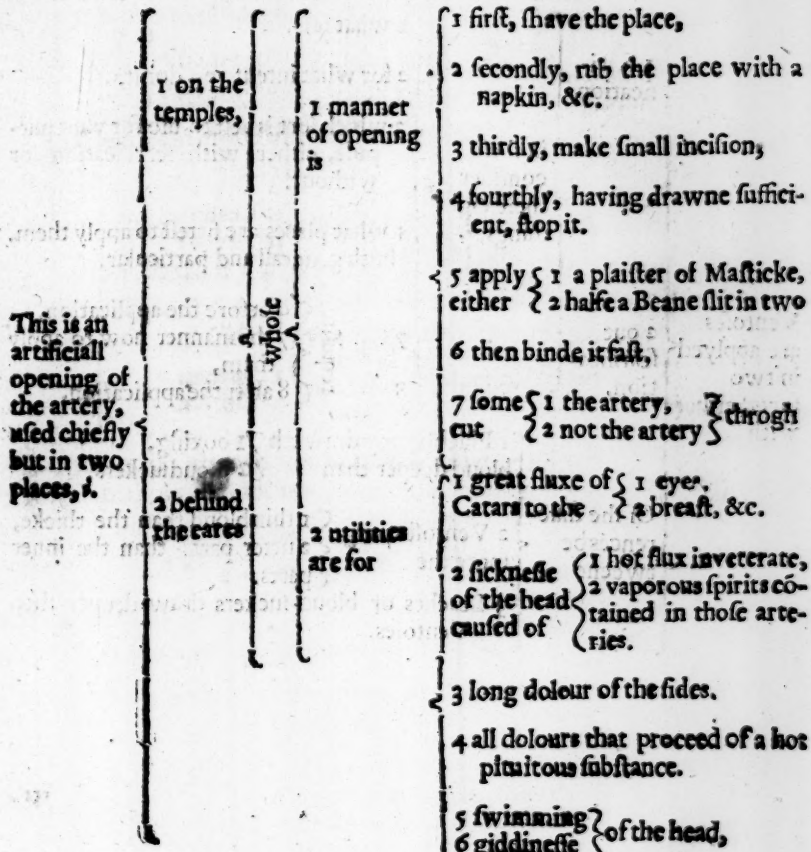
At the present time of bleeding, there is required in the

- 1 Artist in generall, these sixe things, i. to
  - 1 have cleare and perfect
    - 1 sight, 1 day,
    - 2 light either by 2 candle,
  - 2 prepare the member,
    - 1 first, by friction,
    - 2 secondly, by ligature,
    - 3 thirdly, to stay the veyne that it slip not,
    - 4 fourthly, to open it, 1. A,
  - 3 consider which is the best way of the three to open it, eyther
    - 1 long wise,
    - 2 overthwart,
    - 3 oblique.
  - 4 know
    - 4 when to make the orifice,
      - 1 large, or
      - 2 small.
  - 5
  - 6
    - 5 6 how to
      - 5 govern the patient
      - 6 redresse any accidents.
      - in time of bleeding.
- 2 Patient in generall, these three things, as
  - 1 quietnesse both of
    - 1 body, and
    - 2 minde.
  - 2 willing obedience,
  - 3 bold and stout of courage, voyd of feare.

After bleeding there is required in the

- 1 Artist these five things, *i.* to
  - 1 remove the ligature.
  - 2 close the wound, and binde it up, *f.* A.
  - 3 place the member fittest from bleeding, &c.
  - 4 Instruct the Patient how to governe himselfe in
    - 1 Dyet,
    - 2 Exercise,
    - 3 Sleepe,
    - 4 Venus acts, &c.
  - 5 discerne and judge of the bloud, what and how it is by the
    - 1 colour,
    - 2 substance,
    - 3 contents,
    - 4 taste, &c.
- 2 Patient diligently to obey, and not to omit the precepts of the cunning Artist, lest hee repent his folly too late, saying had I wist.

Of


This is an artificiall opening of the artery, used chiefly but in two places, i.
1 on the temples,
2 behind the eares
whole
1 manner of opening is
2 utilities are for
1 first, shave the place,
2 secondly, rub the place with a napkin, &c.
3 thirdly, make small incision,
4 fourthly, having drawne sufficient, stop it.
5 apply either 1 a plaister of Masticke, 2 halfe a Beane slit in two
6 then binde it fast,
7 some cut 1 the artery, 2 not the artery through
1 great fluxe of Catars to the 1 eyes, 2 breast, &c.
2 sickneſſe of the head caused of 1 hot flux inveterate, 2 vaporous spirits contained in those arteries.
3 long dolour of the sides.
4 all dolours that proceed of a hot pituitous substance.
5 swimming 6 giddinesse of the head,
7 long fluxion of the eyes.

of

Ventoses are applyed in two sorts, either with

1 scarification,

2 out scarification,

in these consider these eight things, *i.*

1 what it is,

2 for what intent you doe it.

3 which sort is best to use for your purpose, either with scarification or without.

5 what places are fittest to apply them, both generall and particular.

requisite

6 before the application,

7 the manner how to apply them,

8 after the application,

Of the differences betweene

1 Phlebotomy draweth bloud deeper than

1 boxing,

2 bloudsuckers.

2 Ventoses purge more the

1 thin bloud than the thicke,

2 utter parts than the inner parts.

3 Leaches or bloud-suckers draw deeper then Ventoses.

Wee

we apply Ventoſes with

1 ſcarification,

1 to the

1 necke behinde neere the head, for diſeaſes of the { 1 face, 2 head, 3 eyes, 4 palſie, &c.

2 mids of the ſhoulders in { 1 coughes, 2 difficulty of breath.

3 ſides of the necke and chin, in defects of the { 1 mouth, 2 gummes, 3 teeth, &c.

4 ſhoulders for the { 1 breaſt, 2 ſhoulders, 3 plurifie, &c.

5 reines, for apoſtoms of the { 1 reines, 2 liver, &c.

6 armes { 1 pained, 2 uſed in } { 1 ſtead of bloud-letting, 2 yong and old.

7 *Oſ ſacrum* for { 1 fiſtulaes, 2 Hemoroydes.

8 thighes, 9 legges, 10 ancles, } good in { 1 ſtrangurie { 1 matrixe, 2 reines, 3 bladder, &c. 2 ache of the

2 it is { 1 ſomewhat painefull { 1 divert 2 evacuate 2 done either to

2 out ſcarification to the

1 mould of the head to { 1 ſtay rheumes, 2 draw up the uvula.

2 Hypoconders to divert bleeding at the noſe: if the right noſtrill bleed, apply it on the liver, if the left, on the ſpleene, ſo in all other parts: *Galen.*

3 beginning of the nerves in the poule for Palſie.

4 parts under the Paps to divert { 1 menſtrua, 2 livers ventoſitie.

5 ribbes to reduce them.

6 Navell for the { 1 matrix falne, 2 winde collicke, 3 dolour after purgation.

7 Flankes, for ventoſitie of the ſpleene.

8 Vritories to draw downe the ſtone and gravell into the bladder.

9 Eares, 10 orifice of ulcers } to draw out { 1 a thing contained therein, 2 venim or poyſon, 3 matter, &c.

11 tumors to draw matter that lyeth deep to the utter parts, &c.

12 necke in ſquinſie, &c.

13 biting of venemous { 1 beaſts, 2 wormes, &c.

Things to be considered before you apply Ventoses.

Before you apply them, consider these sixe things, *i.*

1 the time of the
- 1 Moone, doe it
  - 1 in the full,
  - 2 not in the wane,
- 2 day is best about 2 or 3 after noone,
- 3 being of the glasses, &c. on the place is halfe an houre.

2 in plethoric bodies doe it with scarification.

3 if the bloud be
- 1 thick,
  - 1 scarifie the deeper,
  - 2 and grosse, foment the place with hot water, and rubbe it well with a hot cloath.
- 2 thin,
  - 1 scarifie lightly,
  - 2 rub the place with the hand first.

4 If you will scarifie, then apply first, ever a dry Ventose, and then scarifie, and then set on the Ventose againe, f. A.

5 Rub well the place first all about with your hand very well to dispersse the bloud and humours, before you apply your Ventose.

6 Apply your Ventose an houre or two after the bath, and never in the bath.

The

1 Horne, &c. to ſucke, prepare the place, and apply them without ſcarification, then ſucke them with your mouth.

2 Glaſſe, &c. put waxe or ſome ſticking plaiſter within, in the bottome, then put in your tow that it ſticke faſt to it, then fire the tow with a candle, and clap the mouth of the glaſſe cloſe on the place, ſ. A.

If they be of

1 draw ſufficient,

2 remove them often if need be, and new ſcarifie it, and wipe it dry, and then apply it againe.

3 any ſort,

3 if it bleed not well after the firſt ſcarification, then rub the place with the mouth of the glaſſe, or thryp it with your naile, and garſe it anew, and ſet on the glaſſe againe.

4 Let it remaine a reaſonable time to draw out ſufficient, if not at one time, reiterate it two or three times, and ever ſcarifie it new.

If winde or evill bloud, groſſe and thicke doe it, after that dry the place ſcarified with a ſoft cloath, and then anoynt the place after the uſe of the Ventoſe with oyle of Roſes, freſh Butter, &c.

After the ventosing is finished.

After ventosing, consider these four things,

1 dry the place eyther with a soft { 1 cloath, 2 spunge.

2 next, anoynt the place eyther with { 1 oyle of roses, 2 fresh butter, &c.

3 he may sleepe within an houre after it.

4 if done with scarification, governe them as those let bloud.

Ventoses

1 must not be set on { 1 womens breasts, 2 other soft places } lest they enter too deepe.

2 if they will sticke fast being applyed, foment the place.

3 must not be kept on long, chiefly { 1 about the principall parts or members, 2 behinde the { 1 necke, 2 shoulders, on the right Hypocconder, &c.

of

In the uſe of theſe conſider

- 1 make good choice of your wormes, ſome be
  - 1 good, and are
    - 1 found in { 1 cleare waters, 2 ponds with ſandy ground or gravell.
    - 2 with little heads and ſmall bodies,
    - 3 round red bellied,
    - 4 rayed on the backe like threeds of gold,
    - 5 kept a day or two in cleane water to { 1 cleanſe them, 2 draw the better.
    - 6 by ſome kept a yeare in a glaſſe, and change the water once in 10 daies, with crums of bread.
  - 2 maligne or venemous, *i.*
    - 1 bred in filthy pooles with carrion, &c.
    - 2 with great heads,
    - 3 greeniſh colour with blew raies on the backe, with blacke bodies.
    - theſe cauſe 4 { 1 tumors venemous, 2 inflammations, 3 ulcers.
    - 5 Meſſalinus dyed by putting one on his knee.
- 2 theſe are uſed where ventoſes cannot, as on the
  - 1 lips,
  - 2 noſe,
  - 3 groyne
  - 4 fingers
  - 5 toes,
  - 6 legges,
  - 7 fundament,
  - 8 matrix mouth
  - 9 parts empty of fleſh,
  - 10 old ulcers,
  - 11
  - 12
  - apoſt. { 11 venemous, 12 emunctory,
  - 13 places bare of fleſh.
- 3 Diſeaſes wherein they are moſt uſed, *i.*
  - 1 morphew,
  - 2 ring wormes,
  - 3 great itch in any part, its fitter then ſcarification,
  - 4 ſet to the hemeroyds, they evacuate from all the members, and excellent for melancholy.
- 4 how to apply them
  - 1 firſt, let the place be very cleane, elſe they will not bite,
  - 2 then rub the part till it waxe red,
  - 3 then apply them, hold it neere the head with a cloth, then pricke the place that it bleed, or put a drop of bloud on the place, and then put the head of the Leach to it.
- 5 how to
  - 1 make him draw
    - 1 much { 1 cut off his tayle, 2 or ſtrip out the bloud with your fingers,
    - 2 little, leave him whole, and being full, will fall
  - 2 remove him, put on his head either { 1 ſalt, 2 vineger, 3 finders or aſhes, ſeparate him with a hayre. (of himſelfe,
- 6 being fallen, if he bleed too much, apply either { 1 lynt, 2 brent cloath, 3 a cloth wet in cold water and vineger, 4 Hyſop ſtampt, &c.

Cetons, in it consider in generall six things, *i.*

- 1 Quid, it is usually a little cord eyther of
  - 1 hayre,
  - 2 threed,
  - 3 silke,
  - 4 cloath,
  - 5 woollen yarne, &c.
- 2 the intent why we use them is eyther to
  - 1 divert flaxes,
  - 2 draw our humours, &c.
- 3 manner of applying is
  - 1 with fit Instruments,
  - 2 eyther with
    - 1 fire much used in old time,
    - 2 out fire, now most in use.
- 4 the places commonly of their application, are generally foure, *i.* the
  - 1 neck behinde, between the first and second vertibers to divert & draw
    - 1 fluxion,
      - 1 head,
      - 2 eyes,
      - 3 gummes,
      - 4 jawes,
      - 5 loynes,
      - 6 backe,
      - 7 haunches,
      - 8 joynts,
    - 2 catars, &c.
    - 3 rheums that fal from the head to the
      - 1 stomacke,
      - 2 lungs, &c.
  - 2 Navell swolne with watry humours, &c.
  - 3 cods or scrotum for
    - 1 watry humours,
    - 2 Hernia aquosa, &c.
  - 4 wounds
    - 1 through the
      - 1 legges,
      - 2 thighes,
      - 3 armes, &c.
    - 2 the better to purge the matter.
- 5 the utilities are to
  - 1 revell or turne a fluxe to the contrary part,
  - 2 derive or draw from the place conjunct,
  - 3 evacuate,
  - 4 intercept, prevent or stop a fluxe, that it fall not to a place to hurt.
- 6 the order to governe him after it is done, *i.*
  - 1 first dresse it presently with a disgestive two or three daies, and so proceed, *s.A.* to other intentiõs,
  - 2 secondly, put in a new Ceton when need is,
  - 3 thirdly, after the Ceton is taken away, purge the Patient, and so doe before you apply any.

Of

Cauteries in generall are of two ſorts, *i.*

1 Actuall done by metallin inſtruments,

2 Potentiall done by burning medicines applyed,

in the applying of which, conſider generally three things, *i.* what to doe

1 before, in which conſider
- 1 the differences,
- 2 which ſort is beſt for your purpoſe,
- 3 their effects,
- 4 how they further your intent,
- 5 who is fit thereto.
- the 6 complexion of the body, 7 nature of the part, 8 diſeaſe, and how it may benefit, 9 time of application, 10 places uſuall thereto.

2 at the time preſent, *i.* to
- 1 to comfort the Patient with good words,
- 2 know how to apply the cauteries
- 3 prepare the place, *ſ. A.*
- 4 to be carefull in doing it, and doe it with good conſideration,
- 5 doe it boldly and effectually, not regarding the clamour or cry of the Patient, but doe what muſt be done, yet be not butcherly,
- 6 binde him faſt if need be.

3 after it is done, conſider how to
- 1 Dreſſe the place,
- 2 continue the iſſue, and how long,
- 3 remove the accidents, and what they bee that uſually happeneth thereby.

In actuall cauteries consider these five things in generall, *i.*

1 it is very profitable in many diseases.
2 its made
- 1 either of 1 gold, 2 silver, 3 iron, 4 steele, 5 lead, &c.
- 2 in divers formes, as the worke and place requires.

3 places to apply them are divers, *i.*
- 1 to the coronal future
  - 1 at the end of the sagitall future,
  - 2 for
    - 1 megrim,
    - 2 other paines of the head,
    - 3 to draw grose vapours from the braine,
    - 4 Epilepsia to breath out venemous vapours at the part.
- 2 as cause is to
  - 1 revell,
  - 2 derive,
  - 3 intercept,
  - 4 evacuate.

4 the utilities it is
- 1 without venemous quality, more
  - 1 healthful, 2 sodainly done
  - 3 sure operation.
- 2 enemy to all
  - 1 venime,
  - 2 corruption,
- 3 free from causing any accident,
- 4 to preserve the part from putrifaction,
- 5 wonderfull to consume a maligne quality hid in the body or member, applyed to the place grieved
- 6 excellent to
  - 6 correct a cold weake distemper,
  - 7 consume & dry superfluous moisture,

8 good in
1. tooth ach,
2. eares payned,
3. squinsie,
4. inflammation of the
   - 1 almonds,
   - 2 columella,
5. rheums
6. polipus
7. ægilops
8. ulcers

corosive, maling, all these following in
- 9 sciatica,
- 10 gangrens,
- 11 great fluxe of bloud,
- 12 mortification,
- 13 carbuncles
- 14 bubons
- 15 corrupt bones to sep.
- 16 venimous bitings, &c

5 after removing of them, apply a fit disgestive to remove the asker, and then use other things, *s.* A.

Of

The potentiall Cauterie is

- 1 Medicines
  - which by extreme heat doe burne the part like fire,
  - 2 of these be divers kinds both
    - 1 simple,
    - 2 compound,
    - 3 naturall,
    - 4 artificiall.
- 2 Carefully to be considered the nature & temperature of the
  - 1 person
  - 2 place
  - that its applyed to, if
    - 1 strong and rude, use strong
    - 2 delicate
    - 3 lean
    - and tender use weaker
    - medicines.
    - 4 nervous,
    - 5 tendous,
    - 6 to the
      - heads of Muscles,
      - 2 great
        - 1 Veines,
        - 2 Arteries.
      - 3 body repleat, then first
        - bleed,
        - purge, &c
- 3 Applyed to divers parts for divers causes, i.
  - 1 chiefly to the
    - 1 Head,
    - 2 Armes,
    - 3 Legs, &c.
  - 2 To the head in 4. places, the haire first shaven
    - 1 oftenest to the forehead where the sagital and coronal sutures meet, it must penitrate to the bone, good for
      - Flux of the Eyes,
      - Megrum,
      - Head-ach,
      - Epilence,
      - Difficult breathing,
      - Obthalmia,
      - Red face,
      - Tooth-
      - Eares
      - ach.
      - Squinsie,
      - *Vnula*,
      - Almons,
      - falne.
    - 2 also
      - 2 behind
      - 3 above
      - the eares on each side of the head.
    - 3 at the end of the Suture Lamdoyd, not on the Muscle *Cratophit*, to be sure hold your finger on the place, and cause him to open and shut his mouth, to and fro, so may you perceive the Muscles end,
    - 4 to the neck
      - 1 betweene the first and second *vertiber*,
      - 2 for
        - 1 inveterate flux of the eyes,
        - 2 catters
        - 3 distillations
        - to stop them from falling to the brest
  - 3 *Item*, in the inside of the armes about the midst, if it neere the
    - 1 Veins,
    - 2 Arteries,
    - but touch them not.
  - 4 on the legge three inches from the knee either in the
    - 1 outside betweene the two bones,
    - 2 inside neere the Veines.
- 4 Applyed to divers other parts
  - 1 of the body to issue out matter contained
  - 2 as in
    - 1 vehement dolour,
    - 2 humours maligne,
    - 3 vaporous fumes.
    - 4 Emunctories
      - 1 to expell
        - 1 vapours,
        - 2 humours.

Baths are either universall or particularly used and are generally of two sorts, *i.*

1 Naturall
2 Artificiall

in the use of which consider generally five things *i.* their

1 Qualities either { 1 hot, 2 cold.
2 Effects as to { 1 bind. 2 loose. 3 open the pores. 4 restraine. 5 make thin. 6 heat. 7 coole. 8 dry. 9 moisten. 10 cleanse. 11 evacuate. 12 resolve. 13 appease dolour, &c.
3 Vtilities, *i.* as to { 1 preserve health, 2 cure diseases.
4 Order, *i.* the { 1 Preparation of the body before.
2 Manner { 1 of bathing. 2 to hot { 1 closeth the pores. 2 stops excrements. 3 heats the bloud.
3 Time { 1 to bathe is either { 1 in the morning fasting. 2 at 4. after-noon.
2 staying in it { 1 day halfe an houre. 2 next one houre or two.
2 ing into long hurts.
5 Hurts being ill used, *i.* { 1 immoderately { 1 dryeth the body 2 weakens the body
2 goe not in with a full stomack it hurts much.
3 also not to dry the head well after a Bath doth very much hurt.

of

Frictions in it consider these six things, *i.* their

1 Definition, it is a rubing or friction of the vtter parts of the body, or part either
- 1 generall on all the body.
- 2 a particular part as: 1 Head, 2 Arme, 3 Legge, &c.

2 Kinds are three, *i.*
- 1 hard.
- 2 soft.
- 3 mean.

3 Times
- 1 it may be done at all times, chiefly in the mornings.
- 2 are either: 1 long. 2 short. 3 mean.

4 Effects it
- 1 hard and
  - 1 long it
    - 1 fasteneth, constraineth, makes the flesh hard.
    - 2 extenuateth, dissolves, makes revulsion.
  - 2 short it
    - 1 makes the skin red for a time.
    - 2 leaveth the flesh moist, and very little hard.
  - 3 mean, increaseth and filleth with flesh, but hard.
- 2 soft and
  - 1 long
    - 1 evaporateth and breatheth out.
    - 2 diminisheth the flesh.
    - 3 openeth the pores of the skin.
    - 4 leaveth the flesh soft and moistneth.
  - 2 short makes little alteration.
  - 3 mean
    - 1 makes thick
    - 2 agments and filleth with flesh, yet: 1 soft, 2 foggie, 3 moistish
- 3 mean and
  - 1 long diminisheth and leaveth the flesh neither: 1 hard. 2 soft.
  - 2 short
    - 1 warmeth a little.
    - 2 leaveth the flesh in a mean.
  - 3 bring in
    - 1 quality
    - 2 quantity
    - agments the flesh neither to: 1 hard. 2 soft.

5 mãner of doing it
- 1 either with a
  - 1 warme hand.
  - 2 sponge.
  - 3 course linnen cloth warme, &c.
- 2 in this order
  - 1 soft and easie till the place become red.
  - 2 begin below and so ascend upwards.

6 utilities it
- 1 dispereseth: 1 humours. 2 spirits. 3 excrements.
- 2 warmeth and exciteth naturall heat.
- 3 looseth and openeth the pores of the skin.
- 4 mollifieth or hardneth, used accordingly.
- 5 diverts Fluxes, Rheumes, &c.
- 6 causeth free passage of bloud and humours in the fleshy parts.
- 7 prevents or removeth: 1 Scabs. 2 Itch. 3 Tumours. 4 Cramps. 5 Cold. 6 Dolour of diseases

All the Applicative Medicines which the Chyrurgion uſeth, their operations are generally but eleven as followeth.

These are thoſe eleven as

1 Anodines to appeaſe paine are of three ſorts done either by
- 1 Attractives,
- 2 Evacuatives,
- 3 Narcotticks.

2 Repercuſſives be three ſorts done either with things either by
- 1 cold and moiſt,
- 2 cold and dry,
- 3 hot and aſtringent to corroborate.

3 Reſolutives are of two ſorts, *i.*
- 1 Rarificatives,
- 2 Diſgeſtives.

4 Mollificatives done by ſtrong heat and little
- 1 Dryneſſe,
- 2 Moiſture.

5 Attractives three ſorts done either
- 1 elementall quality, *i.* heat and thin ſubſtance,
- 2 hidden propertie as Purges worke,
- 3 accident.

6 Suppuratives, *i.* two ſorts done by
- 1 things hot and moiſt,
- 2 accident.

7 Mundificatives they
- 1 ſeparate
- 2 draw
- 3 ſcoure

out excrements by hidden property

8 Incarnatives ſcowre and dry moderately to increaſe fleſh.

9 Conglutinatives be
- 1 dryer then
  - 1 Incarnatives.
  - 2 Cicatrizatives.
- 2 leſſe dry then
  - 1 Incarnatives.
  - 2 Cicatrizatives.

10 Cicatrizatives be hot and aſtringent, ſome
- 1 proper by nature.
- 2 Artificiall.

11 Coroſives are of three ſorts, *i.*
- 1 Veſicatories,
- 2 Cauſticks or ruptories.
- 3 Coroſives.

More of all theſe ſhall follow in order to ſhew more at large particularly,

These be generally of two sorts, i.

1 Proper and are

all that contrary the cause of pain, which is either
- 1 distemper of
  - 1 heat,
  - 2 cold,
  - 3 dry
  - 4 moist

  for heat or cold cause sharpe pains, & cause sodain change do cause mean pains. cause little dolour.
- 2 solution of unitie.

2 all that
- 1 open,
- 2 purge,
- 3 rarifie,
- disburthen nature
- 4 digest,
- 5 attenuate,
- 6 evacuate,

of matter either
- thick,
- viscous,
- windy,

vaporous, sharpe, cold, &c.

3 done so that it exceed not above one degree of temperature, of the distemper that causeth the pain in either
- 1 heat,
- 2 cold,
- 3 drith,
- 4 moisture,

doe all *S. A.*

4 used
- 1 first to contrary the disease,
- 2 in paines that be not very stubborne or rebellious, to resist either in

1 inflamation, 2 fluxion, 3 tumour, &c.

2 Improper and are

1 Narcotticks, stupifactive, *i.* to astonish the sence of the part.
2 Seldome used before purging in weak parts, or neere noble part.
3 Most commonly cold in the fourth degree.
4 Such
- 1 as stop the passages of the Animall spirit from the part, and so deprive the sence thereof,
- 2 as neither removes the
  - 1 cause
  - 2 paine

  doe stupifie and benumme the part.

5 Done by accident, as by
- 1 hard ligature.
- 2 compression.

6 Vsed in bitter paines
- 1 that resist all other Medicines,
- 2 sometimes first, lest the patient perish.

7 Seldome used
- 1 without addition of
  - 1 Castorium. 2 Mirrh.
  - 3 Saffron, &c.
- 2 without those correctives for feare lest they
  - 1 extinguish the naturall heat
    - 1 mortification. (&c.
  - 2 cause
    - 2 blacknes of the part

Herein consider
- 1 cause of pain
- 2 paine it selfe
- 3 part pained

also consider, some Medicines remove
- the
  - cause,
  - paine and not the cause.
  - neither
    - 1 cause
    - 2 paine

  but stupifie.

Note intolerable pains by
- 1 inflammation
  - are soone mitigated by
    - 1 bleeding
    - 2 purging (part
    - 3 scarifying the

  then by other
    - 1 Anodines
    - 2 Narcotticks.
- 2 gangrena

Dolor sit medicina doloris.

Repercussiues bee generally of 2 sorts either by
- 2 Nature being also of two sorts, either
  - 1 watry, cold and moist without any astriction, and
    - 1 therefore weak as
      - 1 Purslane,
      - 2 Lettice,
      - 3 Melons,
      - 4 Housleeke,
      - 5 All Narcotticks, &c.
    - 2 Doe expell and drive back by cold, &c.
  - 2 Earthy and astringent of which some be
    - 1 cold
      - 1 grosse
        - 1 and of earthy parts,
        - 2 be truly Repercussives.
      - 2 and more effectuall mixt with
        - 1 lenitive things,
        - 2 Vineger in cold grosse matter.
    - 2 Hot and corroborative and keepe backe Fluxes.
  - Simple Compound
  - 2 Accident without quality as
    - 1 legiture,
    - 2 compression,
    - 3 rolling,
    - 4 revulsion, by
      - 1 bleeding
      - 2 friction
      - } opposite.
    - 5 ventoses, &c.

Consider
- 1 Well to remove your Medicine before
  - 1 the part wax black,
  - 2 it extinguisheth naturall heat.
- 2 To respect herein the
  - 1 Complexion of the
    - 1 body,
    - 2 part pained.
  - 2 Medicine to be made fit to the
    - 1 griefe,
    - 2 part offended.
  - 3 Nature of the part grieved, for all parts may not endure like repercussion.
- 3 By no means apply repercussives
  - 1 to the
    - 1 Groynes,
    - 2 Arme-pits,
    - 2 Glandles behind the Eares.
  - 2 strong to
    - 1 Women,
    - 2 Children,
    - 3 Eunuches.
  - 3 on
    - 1 bodies
      - 1 plethorick
      - 2 full of ill humours
      - } before purging.
    - 2 make
      - 1 grosse
      - 2 sharpe
      - 3 venemous
      - 4 criticall
      - } but use rather attractives.
- 4 Weak repercussives in great
  - 1 inflamations,
  - 2 disease,
  - } as Lettice, &c. availe little.
- 5 Put no strong repercussive on a small defluxion, for it
  - 1 straightens the skin,
  - 2 stops the passages,
  - 3 increaseth the inflamation,
  - 4 often causeth
    - 1 *Scirrus*,
    - 2 Induration, &c.
- 6 To repell carefully according to the
  - 1 magnitude of the disease.
  - 2 strength of the patient.
  - 3 nature of the
    - 1 flux,
    - 2 member offended.

Resolutives are of two sorts, i.

1 worke by heat and thin substance they doe
- 1 dry little,
- 2 open } the pores of the
- 3 relax } Skin,
- 4 attenuate humours,
- 5 dissipate } by evaporation things shut up under
- 6 discus } the Skin, and doe ease the paine as Anodines doe.

1 Rarifactives are
- 1 simple as
  - 1 Sage,
  - 2 Ebulus,
  - 3 Melilot,
- 2 compound as
  - 1 Dill,
  - 2 Camomill,
  - 3 Lillies, &c.

2 called weak resolutives used in the
- 1 increase } of superficiall
- 2 state } humours,
  - 1 windy.
  - 2 matter } 2 hot and moist.

1 called *Diaphoretick*, or relaxes
- 1 simple, as these & such like,
  - 1 *Bryoni*,
  - 2 *Galbanum*,
  - 3 *Thus*,
  - 4 *Ammoniacum*, &c.
- 2 compound as
  - 1 Oile } 1 Bay, 2 Tyles,
  - of } 3 *Nardinum*.
  - 2 *Diapalma*,
  - 3 *Oxycroceum*, &c.

2 Digestives.

3 bee
- 1 then Rarifactives.
- 2 to divide insensible matter compact.
- 3 often then Attractives, for oft an Attractive applied to a hard body is resolutive, but used to some other, it draweth from within.

4 Are not used in the increase of Tumours, except Astringents be added, least thereby they draw and increase the fluxion.

5 Used
- 1 only in the declination of Tumour.
- 2 where the Humour
  - 1 Skin is thick and hard.
  - 2 after incisines left it
    - 1 is cold and grosse
      - 1 mollifie the subtile
      - 2 harden the grosse } part
    - 2 hot and subtile
  - 3 lyeth deep in the body or part grieved.
- 3 in part of least sence, because these be strong workers.

6 Are not used to
- 1 A part oppressed with fluxion
  - 1 for feare of
    - 1 *Grangena*,
    - 2 *Sphacelus*.
  - 2 There leave resolution, and use scarification, &c.
- 2 the
  - 1 Liver,
  - 2 Spleen,
  - 3 Stomack,
  - 4 Bowels,

  } but with Astringents added.

7 Are applyed to a part more
- 1 dull, use the stronger, &c.
- 2 sensible as the
  - 1 Eye
  - 2 Nerves

  } weaker.

Also in cold and
- 1 incisines to cut and make thin the matter first.
- 2 next mollifications.

These are

1 soften and relax hard parts
- 1 and to bring them to their naturall estate.
- 2 hardned either by
  - 1 consolation, cure it by things hot and dry.
  - 2 drynesse cure it by things hot and little moist, as in Scirrus.

2 Temperately hot without manifest shew of
- 1 drynesse, for if heat and drynesse joyne together, it causeth attraction.
- 2 Moystnesse such are putrifactives, for if the heat cannot overcome the moysture, it causeth putrifaction.

3 To worke more by strong heat
- 1 to moysten as the Sun dissolves Ice, &c.
- 2 but are temperate in
  - 1 drying,
  - 2 moystning.

Some
- 1 simple and weak as
  - 1 Lillies,
  - 2 Mallowes, &c.
  - 3 Butter.
- 2 compound as oiles of
  - 1 Lillies,
  - 2 Almonds Dulc.
  - 3 Camomill, &c.

5 Many of them are hot in the first, and dry in the second or third degree,

The better to
- 1 disperse, the congealed matter, consuming a little of the humiditie, contained within the part affected, but not drawing it by violence of heat and drith, thereby would follow greater hardnesse.
- 2 diffuse,

6 Some
- 1 weake as
  - 1 Butter,
  - 2 *Lana succida*.
- 2 strong as
  - 1 *Amoniacum*,
  - 2 *Galbanum*.
- 3 to mollifie
  - 1 *Scirrus* tumours of the musculous parts, &c.
  - 2 Hard lips of Vlcers.
  - 3 the
    - 1 Belly,
    - 2 Bowels,
    - 3 Limbs,
    - 4 Glandles,
    - hardned by cold grosse matter and viscous either of
      - 1 Phlegme,
      - 2 Melancholy, &c.
    - that worke by stronger heat then Suppuratives.
- 4 Melancholy tumours be exasperated with mollificatives, & turn to Cancers.

7 Hurt full to
- 1 Cancers,
- 2 Maligne tumours.

8 Herein considers
- 1 in the use of them three things,
  - 1 the
    - 1 greatnesse
    - 2 nature
    - of the
      - 1 corruption,
      - 2 part.
  - 2 whether you must adde incisines or no.
- 2 how much the part differs from its owne temperature, the better to use fit Medicines.
- 3 to distinguish the nature of the disease and parts how it must be done, whether to mixe with the mollificatives either
  - 1 discussives,
  - 2 mundificatives to deterge.

Note
- 1 many desperate *Scirrus* tumours that resist all mollification doe grow hard and sencelesse, and become smooth without heare by stopping the pores.
- 2 sometimes the part becomes cold in excesse, so that the native heat shewes plainly to decay, then use an Iron Stove, &c. to restore the heat, heat againe as *Ambrose Parrey* describeth.

Of

Attractives.

1 Are generally two. { 1 Simple as Ammoniacum, Galbanum, Euphorbium, &c.
2 Compound.

3 Must neither { 1 Burne.
2 Discusse.

3 Must be hot with thin substance the better to pierce.

4 Draweth to the utter parts, offensive matter that works within the parts

5 Worke effects by three meanes either by { 1 Elementall quality of heat and thin substance.
2 Hidden propertie, as { 1 The { 1 Loadstone draweth Iron.
2 Heat draweth a straw.
2 Vomits } workes their effects.
3 Purges }
4 All Antidotes against venome, &c.
3 Accidents, as { 1 *Sternens animi.*
2 Leven.
3 Old Cheese.
4 Sharpe things applyed that doe { cause { 1 Dolour.
2 Inflammation
3 Blisters.
burning, &c.
5 Ventoses.
6 Suckings.
7 Horseleaches.
8 Hard { Friction.
Ligature, &c.

6 If { 1 Weake adde One of Bay, &c. to strengthen them.
2 Strong and sharpe, adde One of Roses, or other lenitives.

7 Vtilities are to { 1 Open. { 1 Heat to cold parts.
2 Thornes.
2 Draw out { 1 Wood.
2 Bones.
3 Splinters of { 1 Iron.
2 Things fixed in the flesh or parts, &c.
4 Matter and filth from maligne Vlcers, &c.
3 Restore cooled parts to life by drawing thither the spirits vitall.
4 Hasten Criticall Tumours.

Draw life into parts. { 1 Benummed.
2 Consumed and withered.
3 Cooled by restoring vitall heat and spirit into it by Attractives.

Suppuratives.

1 Shut the pores, and
- 1 prevent transpiration by
  - 1 consistence.
  - 2 Emplastic to hinder evaporation.
- 2 so increaseth the heat, & turns the matter into
  - 1 *pus*, &c.
  - 2 *sanis*, &c.

2 are
- 1 Hot and moist, so that the heat cannot subdue the moisture.
- 2 Little exceeding the naturall heat of the member with moisture.

3 By naturall heat turnes the blood and humours superfluous into matter.

4 Differ from molificatives in being hot, but according to the native heat of the part affected.

Or else Emplastic to augment the naturall heat by closing the pores
- 1 Vnable to evaporate, in which they differ from molificatives
- 2 And so the matter being kept in, converts to *pus*.

5 are generally of two sorts.

1 Proper
- 1 All that heat, having any moisture.
- 2 Rightly prepared, if they little exceed the naturall heat of the member with moisture.
- 3 Such as worke more by abundance of moderate heate then by sharpe qualitie.
- 4 Either
  - Simple, as
    - 1 Lillies.
    - 2 Figs.
    - 3 Myrtle.
    - 4 Galbanum.
    - 5 Amoniacum.
  - Compounded, as
    - Mucilages.
    - Diachilon.
    - Oiles of
      - 1 Lillies.
      - 2 Lumbric.

2 Astringent
- 1 Such are
  - 1 Emplasticks that stop the
  - 2 Repercussives, that by cold pores.
- also
  - 1 Astringents by their earthy and thick parts doe suppurate as *mu. de bole. Nutritum.*
  - 2 Such as to keep in the heate, and shut the pores, for which Sorrell is highly commended, to generate *pus*, for by keeping in the heat, it increaseth its effects, to thicken the rotten matter, and also it overcommeth other rebellious qualities.
  - 3 Ripening are used in
    - hindred
    - great inflamations whole
    - increased cannot be
    - with
      - Repellents.
      - Resolutives.
      - Discussives.

6 Are used in
- 1 Great contusions.
- 2 Wounds contused.
- 3 Phlegmon which will scarsly
  - 1 Repercusse.
  - 2 Resolve.

These
- 1 Clense ulcers, &c. and are hot and of thin substance.
- 2 Purge a double excrement, *i.*
  - 1 thick, *i.* sordes & drawes from the bottome of ulcers.
  - 2 thin and watry, *i.* sanies, done by drying Medicines.
  - 3 so every ulcer must be clensed and dried. *S. A.*
- 3 Are some
  - 1 simple & are either.
    - 1 sweet as
      - Licoris.
      - Hony.
      - Sugar, &c.
    - 2 sower as
      - Vineger.
      - Tender tops of Vines.
      - All sower things, &c.
    - 3 bitter as
      - 1 Alloes.
      - 2 Absinth.
      - 3 Scabeos.
  - 2 Compound as
    - 1 *Lixivium.*
    - 2 *Apostolorum.*
    - 3 *Præcipitate, &c.*
  - 3 Weake.
  - 4 Strong.
- 4 Seperate and draw excrements from ulcers, &c.
- 5 Are used.
  - 1 to clense ulcers, &c. before the use of incarnatives.
  - 2 But first, consider these 4. *i.* the
    - 1 Whole body, whether it be
      - 1 Healthy.
      - 2 Plethoric.
      - 3 Cacochimiall.
    - 2 Part which is
      - 1 Moister.
      - 2 Dryer.
      - 3 More
        - 1 Exquisite.
        - 2 Dull or sencelesse.
    - 3 Accidents.
      - 1 Callus.
      - 2 Dolour.
      - 3 Induration
      - 4 Flux of humours as
        - 1 Hot.
        - 2 Maligne, &c.
    - 4 Ulcers whether,
      - 1 Neat.
      - 2 Old.
  - 3 In which consider in
    - 1 all the foresaid medicines they must differ in
      - 1 Quality.
      - 2 Quantity
        - As the cause requireth.
    - 2 an ulcer.
      - 1 Dry and painful, none will agree but a moist abstersive, &c.
      - 2 moist, none will agree but dry powders, &c.

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      - 2 Quantity
        - As the cause requireth.
    - 2 an ulcer.
      - 1 Dry and painful, none will agree but a moist abstersive, &c.
      - 2 moist, none will agree but dry powders, &c.

These

1 By moderate drying
- 1 get flesh in hollow Vlcers,
- 2 helps Nature to remove superfluities.

2 Differ
- 1 According to the
  - 1 Temperature of
    - 1 Body,
    - 2 Part affected,
  - 2 Quality
  - 3 Quantity
  - of the bloud.
- 2 For.
  - 1 Nature is the efficient cause of this worke.
  - 2 Good bloud is the materiall cause.
  - 3 The Medicine.
    - 1 The assisting cause, by consuming the Excrements,
    - 2 Without which it cannot be done,
    - 3 Removes the cause that hinders nature.

3 Must be mixt according to the affects which passeth the Vlcer.

4 Have double vertue to
- 1 Scoure and dry without byting or corosion,
- 2 Dry the thin Sanies lest it cause
  - 1 Sordes.
  - 2 The Vlcer to be more filthy.

5 Must dry in the first degree
- 1 Saith *Galea*,
- 2 Forbearing to dry, it consumes the moysture of the bloud that causeth the flesh.
- 3 I meane a degree dryer then the body or part, if it be
  - 1 More dry it causeth either
    - 1 Inflamation,
    - 2 Dolour,
    - 3 Asker, &c.
  - 2 To moyst or breede
    - 1 Matter of filth,
    - 2 Hollownes for want of drying
- 4 For
  - 1 It is
    - 1 on
    - 2 another
    - thing to
      - 1 adde that which lacketh, which is done with things like,
      - 2 diminish & done by contraries
  - 2 Every thing is
    - 1 Maintained by its like,
    - 2 Destroyed by its contrary.

6 Are some
- 1 Weake,
- 2 Strong,
- Simple as
  - 1 Thus,
  - 2 Arabic,
  - 3 Sarcocole.
- 2 Compound as
  - 1 *Unguentum aurum*,
  - Emplaysters,
  - Powders, &c. fit thereto,

7 To speake truly, no Medicine can properly be called Incarnative.

8 Ought to be more liquid in deep Vlcers or Wounds.

9 Not to be used before the ulcer be
- 1 cleansed
- 2 free from
  - 1 Paine,
  - 2 Inflamation,
  - 3 Fluxion,
  - 4 Hardnesse,
  - 5 Distemper or any accident that may hinder the cure.

10 Drying to
- 1 little
- 2 much
- cause filthy ulcers because the
  - 1 Dryeth not enough.
  - 2 Its Acrimony doe cause fluxion, &c.

Also consider some parts be lesse dry by nature, and so require a Medicine
- 1 More drying
- 2 Stronger Incarnative
- then other that are more dry, as the Glandels must be more dried then the proportion, though the Glandell be lesse dry.

These must be diligently examined and very well considered.

These

1 Are betweene Incarnatives and Cicatrizatives

2 Dry { 1 lesse / 2 more / 3 in the second degree } then { Cicatrizatives. / Incarnatives. }

3 Let the Flux by its astringent faculty, being free from detertion, and so joyneth the parts divided.

4 Doe conglutinate some by { 1 their proper nature as { 1 All the { 1 Consolidaes. / 2 Plantaines, &c. } / 2 Saincle. / 3 Elder. / 4 Sopewoort. / 5 Balsome. / 6 Aquavitæ. / 7 Turpentine. / 8 Clownes wound-woort. / 9 All things *acerba*, &c. } / 2 Accident as { 1 stitching. / 2 rolling. / 3 binding. / 4 rest. / 5 all that hinder fluxion, and bind the parts, &c. }

5 Ioyneth parts distant and helps nature, who is the chiefe agent in this worke.

6 Herein consider whether the { 1 Bodie be either { 1 hard } that is, { 1 robust. / 2 soft; } how { 2 tender. } / 2 Vlcer be { 1 New, / 2 Old, / 3 Great, / 4 Little. } } Hence take your Indications what the { 1 qualitie, / 2 quantitie, } of the Medicine ought to be.

7 Herein consider before you apply them. { 1 Whether the skin be { 1 but divided. / 2 cleane gone. } / 2 That all knit difficulties if the skin be gone by any (meanes.

8 Are used to { 1 New / 2 Greene / 3 Bloudy } Wounds. / 4 Fistuloes. / 5 Vlcers { old / maligne. } } Because they let and hinder the fluxe of humours from flowing to the place, &c.

1 Dry without Mordication.
2 Astringe, bind, thicken, harden the flesh into a skinny substance called a Cicatrize or skarre.
3 Are also the worke of Nature, except something hinder it, which Art must amend.
4 Consume superfluous moisture.
5 Thicken and bind the next adjoyning flesh, and must dry more then Incarnatives.
6 Assist Nature to cause a skarre in stead of skin.
7 Are of three sorts, the
- 1 Only dryes and binds, and be true Cicatrizes.
- 2 Be sharpe bytings to wast proud flesh, use such sparingly, and that only in hard and rustick bodies, chiefly to dry and consume superfluous moysture.
- 3 Only dries moderately without astriction.

8 Are used when the ulcer is neer filled with flesh, equall with the skin.

9 Herein consider,
- Thefe
  - 1 Tender. Soft. Delicate. — Here such things as Cicatrize in rusticks, will prove corosives in these tender bodies.
  - 2 Rusticks and hard, to these use Cicatrizes more drying.
- 1 The body, if
  - 3 Plethoric, such doe not easily admit Cicatrizes.
  - 4 Cacochymiall, *i.* of ill juice, these hinder Cicatrizes untill the body be freed from that evill disposition, & brought to a good habit by the help of phisick, &c.
- 2 Well
  - 1 To remove all such lets as hinder your intent, and then proceed *S. A.*
  - 2 Whether the ulcer be fed by the present defect of any part evill affected. As
    - 1 Liver.
    - 2 Lungs.
    - 3 Spleene.
    - 4 Varicks finding it, &c.
    - 5 For that must be first cured before it be Cicatrized.
  - 3 If hard typs of an ulcer doe let then scarifie or soften the hardnesse, else it will not Cicatrize.
  - 4 Too
    - 1 much drying leveth the skar too
      - 1 hollow or low.
      - 2 high raised up.
    - 2 little

Now

All ſimple Medicines have one or many of theſe foure Elementall qualities, *videlicet*, either to
1 Heat.
2 Coole.
3 Dry.
4 Moiſten.

Heat.
- 1 Moderate
  1 Heats.
  2 Attracts.
  3 Rarifies.
  4 Opens the paſſages and conduits.
  5 Digeſteth.
  6 Suppurats.
- 2 Immoderate
  1 Dryeth.
  2 Inflameth.
  3 Burneth.
  4 Biteth whereof enſueth.
    1 Violent attraction.
    2 Rubification.
    3 Conſumption.
    4 Pining of the parts.
    5 Askers.
    6 Mortification.

Cold.
- 1 Moderate.
  1 Cooleth.
  2 Stoppeth.
  3 Reſtraineth.
- 2 Immoderate.
  1 Congealeth.
  2 Stupifieth.
  3 Mortifieth.

Moiſt.
- 1 Moderate.
  1 Moiſteth.
  2 Lubrifieth, *i.* makes ſlippery.
  3 Mittigateth and ſweetneth.
  4 Makes ſmooth.
  5 Glueth.
- 2 Immoderate
  1 ſtops or obſtructeth.
  2 lifts up.
  3 breeds flatuous, chiefly if the moiſture be vaporous.

Drieth
- 1 Moderate.
  1 Dryeth.
  2 Rarifieth.
  3 Attenuateth.
- 2 Immoderate
  1 Binds.
  2 Contracts and ſhrinks.
  3 Cauſeth chaps or fiſſures.
  4 Cauſeth dry ſcales, dandruffe, furfuration, &c.

The

The effects of these qualities be set in certaine order called degrees, because they should be applyed by a certaine measure or proportion.

Example.

A disease hot in the second degree, the Medicine must be cold in the like degree, or little exceeding, and for yout better instruction consider.

That all simple Medicines be either { hot, cold, dry, or moyst, either in the { 1 beginning, 2 middle, 3 end, } either of { first second third fourth } degree.

The heat, cold, drith, or moisture of the { first second third fourth } degree is { 1 obscure and insensible, 2 manifest and apparent. 3 vehement or violent. 4 very immoderate or excesse.

Example.

Water only { Warme in temperate; 1 A little hotter, 2 Manifestly hot, 3 Vehemently hot, Scalding hot. } is hot in the { first second third fourth } degree.

Iudge the like of all other qualities, as of cold, drith, and moysture.

How to deale in all diseases of every Complexion, for either the disease and the complexion agree in quality, or be contrary to each other.

Example.

These agree when both the complexion and the disease be either { 1 Hot, 2 Cold, 3 Dry; 4 Moyst, } Such require more gentle and weake remedies on Medicine.

Examples of these familes.

If the Complexion and the disease be both { 1 hot, 2 cold, 3 dry and hard, 4 moyst & soft, } there use things { 1 Mild and least cooling is best, 2 Meanly hot not extreme brings rest, 3 Least moystning best please, 4 That dry least, bring best ease.

Remember still to countergard the Complexion,

Example of Contraries.

If the complexion & the disease bee contrary as the complexion. { 1 hot 2 cold 3 dry & hard 4 moyst and soft } with { 1 cold, 2 hot, 3 Moist, 4 dry. } disease { 1 hottest, 2 coldest, 3 dryest, 4 moistest. } remedies or medicines are best, it must surmount the temperature of the Complexion, otherwise the Complexion it selfe would effect it.

Observe due regard of all the above said things, otherwise you hurt or destroy, and not preserve or cure, for want of the true considerations hereof, great errours are daily committed, as well in many Professors of Physick, as in Surgery a very common fault in many fit to be redressed.

How

Divers have shewed the { 1 proper nature, 2 qualities, 3 effects, 4 operations } of Medicines drawne by their true effects.

Yet have they other operations which be { 1 not by Elementall qualitie, 2 done by accident.

Example.

Heat extern { 1 cooleth the inner part by accident, by opening the pores, and so the heat evaporates out with the spirits, and so diminisheth both appetite and disgestion. 2 Invironing us, moisteneth by accident, by lubryfying, or moistning, scattering and spreading the humours congealed and setled with cold, so is Venery thought to moisten.

Cold extern { 1 heateth { 1 the bodies inwards { 1 not by it proper nature, 2 by accident. 2 by accident, example of cold in Winter with outward cold closeth the pores, lets the expiration of vapours, and issues of naturall heat, and repels that heat to the inner parts. 2 Doubleth the inward heat, as they that handle snow, feele after very great heat by like reason. 3 furthers concoction. 4 strengtheneth the appetite, and for that cause the appetite is greater in Winter then in Summer. 5 Dryes by accident, by repelling the moist matter that was ready to flow downe to any part.

Example.

By immoderate use of repercussives by repelling matter { 1 flegmatick, 2 grosse, 3 viscous, } They harden the matter collected & turns it into Scirrnes, hardnesse from a grosse viscous flegme.

Drinesse, Moistnesse, } because they be qualities passive, shew not their operations as heat and cold doe in their force.

Of the ſecond faculty of Medicines, its that which enſueth the effect of the firſt elementall qualitie, and is as followeth.

Heat doe	1 rarifie, 2 attenuate, 3 open, 4 attract, 5 mittigate, 6 cleanſe.	Cold do	1 ſtop, 2 repell, 3 confirme or ſhut up, 4 congeale or thicken, 5 heape together, 6 reſtraine fluxes.
Moiſt doe	1 ſoften, 2 relax.	Drith do	1 harden, 2 ſtiffen and withhold.

Theſe Medicines following, have their names from their Effects.

We call thoſe	1 anodines,	Which doe	1 appeaſe or mittigate paine,
	2 repercuſſives,		2 repell, or dry backe,
	3 reſolutives,		3 reſolve, rarifie, & open the pores,
	4 mollificatives,		4 mollifie, ſoften hardneſſe,
	5 attractives,		5 draw out,
	6 ſuppuratives,		6 turn tumors, &c. to *pus*, or *ſanies*,
	7 Mundificatives,		7 cleanſe filthy ſores, &c.
	8 Incarnatives,		8 increaſe fleſh in ſores,
	9 Conglutinatives,		9 glue together new wounds,
	10 Cicatrizatives,		10 cover a raw ſore with skin,
	11 Coroſives.		11 gnaw or eat the fleſh,

Of

These for the most part are drawne from

- first and second faculty sometimes by
  - 1 joyning,
  - 2 separating,
  - 3 coupling two qualities together.
  - 4 on qualitie only of the first facultie proceeds the
    - 1 anoidine proper of it selfe by a moderate heating faculty to ease paine.
    - 2 anodine to evacuate the matter causing paine.
    - 3 anodine by narcotticks to
      - 1 Astonish the sence by cold, simply cause rest.
      - 3 Provoke sleepe by cold moisture.
  - 5 Neither of these faculties but by an occult property, as the Loadstone draweth Iron, for which no reason can be shewed: Also when by touching the Needle of a Diall, it shall make that end to stand to the North alwayes is by occult propertie.
- 2 the effects and operations of the said faculties as some be
  - 1 Anodines,
  - 2 Repercussives,
  - 3 Incarnatives, done by two faculties, as by moderate
    - 1 drying.
    - 2 clensing.
  - 4 Cicatrizatives, 5 Conglutinatives, dry and astringe
    - 4 more, 5 lesse, then
      - 1 cōglutinates
      - 2 Cicatrizes.
  - 6 To move or stay
    - 1 Vrine,
    - 2 Sweat,
    - 3 Vomit,
    - 4 Milke,
    - 5 Stoole,
    - 6 Menstrua,
    - 7 Hemoraids, &c.
- 3 A hot and attenuating faculty, such
  - 1 move
    - 1 Sweat,
    - 2 Vrine,
    - 3 Menses, &c.
  - 2 cause Milke, &c.
- 4 The contrary facultties, keepe backe and stop the same.
- 5 Occult cause, as vomit comes neither from the first / second faculty, but from an occult or hidden propertie, naturally planted in any vomitory Medicine, &c.

In these consider their

1 Dependencie, *i.* they worke only by an occult propertie found out by experience, and no reason to be shewed why it doth so.

2 Difference is
- 1 It works not by Elementall qualities of
  - 1 Heat.
  - 2 Cold.
  - 3 Drith.
  - 3 Moisture.
- 2 Also this, we see that divers being hot, cold, dry, or moist in on and the same degree, yet produce not the like effects.
  - 1 More in on part then in another.
  - 2 Such that they purge humour more then another.
  - 3 Knowne only by experience.

3 Manner of working their effects is
- Thus that some hot and dry in the second degree doe cause either
  - 1 Vomit,
  - 2 Egestion,
  - 3 Sweat,
  - 4 Vrine,
  - 5 Milke,
  - 6 neither

  all by an occult property for which no reason can be given why or how they doe so.

5 As
- 1 Agaric, draw 1 Flegme fro the 1 head & joynts,
- 2 Ruberb, draw 2 Choler fro the 2 liver & reines.

4 Medicines are furnished some with
- 1 on simple facultie alone.
- 2 More and those contrary, of which the taste will manifest it unto you.

1 To worke more on this part humour then another, and none can finde out the reason, but only experience.

5 Meanes are partly taken, from the parts they most respect in their operations, as
- 1 Cephalicks,
- 2 Pulmonicks,
- 3 Cordials,
- 4 Hepaticks,
- 5 Splenicks,
- 6 Diuriticks,
- 7 Arthriticks,

  These respect the
  - 1 Head,
  - 2 Lungs,
  - 3 Heart,
  - 4 Liver,
  - 5 Spleene,
  - 6 Reines,
  - 7 Ioynts.

The

1 Definition, it is a decoction of humiditie into dryneſſe, firſt giving a taſte on the tongue, according to the varietie of the matter.

2 Kinds 9, *i.*
- 3 Hot as
  - 1 Acride,
  - 2 Bitter,
  - 3 Salt.
- 3 Cold as
  - 1 Acerbe,
  - 2 Auſtere,
  - 3 Acide.
- 3 Temperate as
  - 1 Sweet,
  - 2 Oily or fat,
  - 3 Inſipid.

3 Differences are according to the degrees of concoction it is { 1 great in hot, 2 leſſer in cold, 3 mean intemperate } taſte

4 Cauſe
- 1 Is heat,
  - 1 That turnes moyſt into dryneſſe.
  - 2 Which is divers by degrees of concoction.
- 2 Of taſte is in theſe two *i.*
  - 1 complexion being either { 1 hot, 2 cold, 3 dry, 4 moiſt, 5 temperate. }
  - 2 Subſtance being either { 1 thick, 2 thin, 3 mean. }

5 Signes are
- 1 Knowne by applying on the tongue well diſpoſed by the nerves.
- 2 Taſte which is { 1 ſtrongeſt of hot, 2 leaſt of cold, 3 mean of temperate } taſte.
- 3 Complexion
  - 1 Hot cauſeth five taſtes, { 1 ſweet, 2 bitter, 3 Oily or unctuous, 4 Salt, 5 biting taſte. }
  - 2 Cold cauſeth foure taſtes, { 1 ſowre, 2 leſſe ſowre, 3 yet leſſe ſowre, 4 inſipid, watriſh without taſte. }
- 4 ſubſtances are 3, *i.*
  - 1 thick ſubſtance cauſeth taſte either { 1 ſweet, 2 bitter, 3 ſowre. }
  - 2 Thin ſubſtance cauſe taſte either { 1 biting taſte ſharpe, 2 Oily, 3 ſowriſh. }
  - 3 Mean ſubſtance cauſe taſte either { 1 ſharpe biting. 2 ſalt, 3 watriſh. }

The order of this concoction.

1. The Acerbe taſte ſhould take place.
2. The Auſtere.
3. The Acide.
4. The next inſtruction of concoction ariſeth thus,
   1. without taſte.
   2. Oily.
   3. Sweet, perfectly, concoct, and temperate,
5. If
   1. ſalt,
   2. bitter,
   3. acrid,

   This concoction exceeds the bonds of mediocritie in the higheſt exceſſe of almoſt a fiery heat.
6. Note that all things that be by nature taſte leſſe, doe not alwayes aſcend to the heighth of ſweetneſſe by the degree of
   1. Acerbitie,
   2. Auſteritie,
   3. Aceditie.

   As if by abſolute neceſſitie that all ſweet things muſt firſt paſſe theſe three degrees.
7. Note that many plants and their fruits being
   1. ripe are ſome
      1. ſowre,
      2. bitter,
      3. ſalt.
   2. unripe are ſweetiſh which after further coction become
      1. bitter,
      2. auſtere,
      3. ſowre.

   Which is a perfection in nature by full ripeneſſe and convocation, and not an exceſſe in nature in that ſpecies.
8. In many things the ſweet and fatty taſte becomes ſo by concoction, as in
   1. Grapes.
   2. Figs.
   3. Peares.
   4. Apples, &c.

Now

Acerbe taſte the

1 Definition, it is a harſh taſte as in unripe fruits betweene bitter and ſowriſh, being yet all raw.

2 Kinds vary according to the { 1 temperature, 2 ſubſtance.

3 Difference it is { 1 dryer, 2 colder, 3 groſſer, 4 earthier, 5 leſſe moiſter } than Auſtere. 6 much leſſe moiſt then Acide.

4 Temperature, it is { 1 notably cooling and drying. 2 of cold, groſſe, and earthy ſubſtance being yet all raw and vnripe.

5 Effects, it is { 1 condenſative, *i.* to { 1 thicken. 2 harden. 3 congeale. 2 refreſhing. 3 ſtopping. 4 reſtraining. 5 repelling. 6 binds } chiefly in the ſuperficiall parts. 7 exaſperates }

6 Some is as the taſte of { 1 Granat peeles, 2 Galls, 3 Tan or Oke barke, 4 Sumach, 5 Cypreſſe Nuts, &c.

7 Some performe as are ſaid in Auſtere, farre more powerfully being abſolutely { 1 earthy, 2 cold, 3 dry, } Not partaking of watry moiſture.

Note that fruits Acerbe before they be ripe, having acceſſion of heat, turne ſweet as Cheſtnuts, doe.

of

Austere the

1 Definition, it is much Acerbe, but milder, not so harsh.

2 Kinds are according to the { 1 temperature, 2 substance.

1 It { 1 Increaseth a degree in concoction, more towards maturity, then Acerbe.
2 Consists in a medium { 1 Not so { 1 dry as Acerbe, 2 moist as Acide.
2 Only by heat and moysture either by { 1 Aire, 2 Water, 3 Moisture only.
3 Having accession of moisture only, and that more grosse of Acerbe, and so causeth Austere.

2 Both Austere and Acerbe are in like degree cold, but austere is the moister.

3 Differences { 1 more { 1 heat alone, 2 moisture alone, and that either { 1 airy and passeth { 1 sweet, 2 Oily } taste.
3 It getteth sometimes { 2 Both together are joyned.

4 If the cold remayning in fruits, a subtle humiditie grow, it causeth taste Acide.

5 If it have a watrish moysture and fit heat, it turnes either to { 1 sweet taste, if the moysture growing with heat be Oily. 2 Oily

4 Temperature, { 1 Its { 1 cold and dry, but not so much as Acerbe, 2 Neere in { 1 temperature, 2 effect, } to acerbe, but lesse drying.
happy bodies acerbe become sweet by the interposed degree of { 1 Austere, 2 Acide, 3 Oilinesse } as they get a divers increase in heate & moisture either { 1 conjunctly. 2 seperately.

5 Effects are as they be { 1 cold, they expell fluxes,
2 dry and earthy { 1 they doe { 1 condense, 2 thicken, 3 stop, 4 straighten the passages, 5 restraine, 6 conglutinate, 7 cicatrize.
2 such are raw unripe fruits.

6 Some consist in a meane, i. a more earthy body, as it is apparent in { 1 Grapes, 2 Services, 3 Gooseberies, 4 Crabs, all fruits. } unripe.

7 Some is changed { 1 with further concoction of heate from Acerbe,
2 Example. { 1 Acerbe fruit, i. unripe by { 1 heat only augmented become sweet, 2 cold being grosse of acerbe turne austere.
2 Cold in fruits augmented, & there retained is turned into Acide.
3 Heat and moisture augment together, if { 1 ayrie, 2 watry, } they passe to { 1 Oily 2 sweet } taste.

Of

Acide the

1 Definition, it is a sowre tast, as is that of: Vineger, Verjuice, Aligere, Sowre juices, &c.

2 Kinds are according to the: 1 temperature, 2 substance.

3 Differences are:
1 According to the kinds.
2 More subtle then any of the two former tasts.
3 The subtiller, the more: 1 piercing or penetrating. 2 It divides almost as powerfully as the Acride.
4 The: 1 thicker in substance, 2 colder the temperature, } The duller in operation.

4 Temperature is: 1 without naturall heat, 2 cold and watry, 3 subtiller then Acerbe or Austere, 4 neere in effect to Acerbe, but lesse drying.

5 Effects, it:
1 attenuates,
2 insides,
3 diuides,
4 penetrates,
5 opens obstructions,
6 clenseth,
7 repels all fluxions by its deep piercing cold,
8 dryes strongly even in its watry consistance.
9 Stayes and stops all: 1 Bleedings. 2 Hæmorrhoids. 3 Dissentories.

6 Manifesteth it force in:
1 Vineger,
2 Verjuice,
3 Iuice of: 1 Lemmons, 2 Sorrell,
4 Cheries,
5 Barbaries,
6 Sloes, &c.

Thus farre of the three cold tasts.

- Insipide the
  - 1 Definition it is
    - 1 fresh or tastlesse as water,
    - 2 improperly called a taste,
    - 3 rather a privation of tastes.
  - 2 Kinds are according to the
    - 1 temperature,
    - 2 substance.
  - 3 Differences
    - 1 it increaseth a degree in concoction from the former more towards maturity.
    - 2 it
      - 1 inclineth more to warmnesse then Acide,
      - 2 cooleth and is grosser substance.
  - 4 Temperature
    - 1 it is cold and moist with a little naturall heat, but not so much as the two following, yet sweetish, not brackish but watrish.
    - 2 It is without
      - 1 taste, as water simply,
      - 2 smell.
  - 5 its effects, and
    - 1 it
      - draweth together the
        - 1 Pores,
        - 2 Orifices of the veines,
      - 2 repercusseth and restraineth by cooling.
      - 3 constupates,
      - 4 stupifieth and astonisheth the member.
      - 5 Moistneth and thereby softneth,
      - 6 cooleth and quencheth heat.
    - 2 Inspisate, that is, it
      - 1 thickneth and congealeth,
      - 2 constipates and stupifies.
  - 6 Some manifesteth its force in
    - 1 Taste
      - 1 Water chiefly.
      - 2 Melons.
      - 3 Cucumbers.
      - 4 Gourds.
    - 2 All of watry tastlesnesse.

The

Sweet taste the

1 Definition it is as Hony, Sugar, Manna, sweet Fruits, &c.

2 Kinds are divers according to the
- 1 temperature.
- 2 substance.

3 Differences it
- 1 is made by moderate and well growing heat.
- 2 consisteth in a matter more
  - 1 thin and hot, then Insipide,
  - 2 grosse then the oily, from which in the first qualities it do not differ.

4 Temperature it is of
- 1 hot
- 2 ayrie
- 3 temperate

} nature

5 Effects
- 1 very sweet
  - 1 clenseth.
  - 2 digesteth.
  - 3 concocteth.
  - 4 ripeneth.
  - 5 relaxeth.
  - 6 asswageth paines.
  - 7 glueth.
- 2 All sweet things worke effects according to its differences of their degrees and their
  - 1 temperatures.
  - 2 substance.

Some is such as are
- 1 Milke.
- 2 Honey.
- 3 Sugar.
- 4 Manna.
- 5 sweet
  - 1 Almonds,
  - 2 Fruits, &c.

Oily taste the

1 Definition it is a taste as
- 1 Oile,
- 2 Butter,
- 3 Greale,
- 4 Marrow, &c.

2 Kinds are divers according to the
- 1 temperature,
- 2 substance.

3 Differences
- 1 are divers according to the kinds.
- 2 some are made of
  - 1 greene unripe
  - 2 mature, or ripe
  - } Olives.
- 3 some be
  - 1 new and pure,
  - 2 old and musty,
  - 3 acrid by nature as that of
    - 1 Lions,
    - 2 Foxes, &c

4 Temperature
- 1 hot,
- 2 moist,
- 3 aierie,

} more then the former sweet taste,

5 Effects, it
- 1 humecteth,
- 2 relaxeth,
- 3 molifieth,
- 4 lubrifieth,
- 5 appeaseth pain.

6 Which are such as
- 1 Olie Olive,
- 2 fresh Butter,
- 3 Greases,
- 4 Marrowes,
- 5 Divers other
  - 1 Oiles,
  - 2 Fats, &c.

Thus much of temperate tastes.

Now follow the three hot and sharp tastes, as first of salt taste { 1 *salt.* 2 *bitter.* 3 *acride.*

Salt taste the

1 Definition, the taste is manifest yet of divers kinds.

2 Kinds as divers according to the { 1 temperature, 2 substance, } thereof as { 1 common Salt. 2 *Sal* { 2 niter, 3 gemm. 4 armoniac, 5 naturall, 6 artificial, 7 Sea-water, &c.

3 Differences are { 1 according to the { 1 kinds, 2 temperature, 3 substance. 2 some { 1 naturally so 2 artificiall & be of divers { 1 natures 2 effects } too long here to recite.

4 Temperature they { 1 are { 1 hot, 2 dry, 3 astringent, 4 are lesse earthy then bitter things. 2 proceed from an earthy drynes.

5 Effects, it { 1 contracteth the pores, 2 cutteth, 3 clenseth, 4 scoureth, 5 restraineth, 6 preserveth from putrifaction, 7 dryeth without manifest apparence of great heat, 8 digesteth, 9 shuts up or thrust together. 10 have many strange operations.

Salts are either { 1 common, 2 naturall, } Salts. 3 artificiall, being divers and rare secrets.

Bitter taſte the
- 1 Definition this taſte is manifeſt, as Aloes, Abſinthium, &c.
- 2 Kinds are more or leſſe according to the
  - 1 temperature,
  - 2 ſubſtance.
- 3 Differences are divers according as they differ in
  - 1 temperature
  - 2 ſubſtance.
- 4 Temperature is
  - 1 hot,
  - 2 earthy and groſſe,
  - 3 drying,
  - 4 abundant heat torrified and dried up.
- 5 Effects taken,
  - 1 inwards it doth
    - 1 purge
    - 2 void ſuperfluous humours.
    - 3 open
      - 1 the
        - 1 pores,
        - 2 mouthes,
        - 3 paſſages,

        of the veins oft by their abſtergent facultie, & ſo cauſe
        - 1 menſtria,
        - 2 hemoroids
      - 2 Subtile and thin.
  - 2 outward it
    - 1 clenſeth,
      - 1 the Sanies from Vlcers,
      - 2 ſuperfluous humours from the bodie.
    - 2 wipeth,
    - 3 ſcoureth,
- 6 Some as, ſuch as
  - 1 Aloes,
  - 2 Gentian,
  - 3 Abſinthium,
  - 4 Centory
  - 5 Colofinth,
  - 6 Fumitorie, &c.

The

Acride taste the

1 Definition, it is a hot biting fiery taste as Pepper, &c.

2 Kinds are divers according to the
- 1 temperature,
- 2 substance.

3 Differences are
- 1 According to the
  - 1 kind,
  - 2 temperature,
  - 3 substance.
- 2 Also to be considered,
  - 1 How and in what manner to use them.
  - 2 Some are
    - 1 venemous.
    - 2 used
      - 1 inwardly safely
        - 1 Pepper,
        - 2 Mustard,
        - &c.
      - 2 outwardly, and not inwards.
      - 3 both inwards and outwards.
    - 3 putrifective as
      - 1 Arsenicum,
      - 2 Realger,
      - 3 and Sublimate, &c.
    - 4 Vesicatores as
      - 1 Cantarades,
      - 2 Sperewort, &c.
    - 5 Caustick as
      - 1 Calx viva,
      - 2 Lixivivum,
      - 3 Oile of Sulphur, &c.

4 Temperature
1. hot.
2. dry.
3. subtle.
4. biting.
5. fires, &c.

5 Effects they
1. heat, prick, bite.
2. open the passages.
3. penitrate.
4. attenuate.
5. draw out grosse humours.
6. evacuates and
   - urine.
   - termes.
   - sweat.
7. sends forth
8. digesteth.
9. inciseth.
10. drieth.
11. purgeth and clenseth.
12. consumes.
13. liquifieth.
14. cause
    - 1 blisters.
    - 2 asters.
    - 3 rubification.

6 Things fit to accomplish this are
1. Pepper.
2. Cloves.
3. Greines.
4. Ginger.
5. Garlick.
6. Onions.
7. Squilla.
9. All the aboveSaid and divers others to be used in time and place as occasion serveth.
10. Exceeding the bounds of mediocritie in excesse and fiery heat.

1 Definition, it is a hot biting fiery taste as Pepper, &c.

2 Kinds are divers according to the { 1 temperature, 2 substance.

3 Differences are { 1 According to the { 1 kind, 2 temperature, 3 substance.

3 Differences are { 2 Also to be consi- { 1 How and in what manner to use them.

2 Some { 1 venemous, 2 used { 1 inwardly safely { 1 Pepper, 2 Mustard, &c. 2 outwardly, and not inwards. 3 both inwards and outwards,

3 purifiative as { 1 Artemeum, 2 Realger, 3 and Sublimate, &c.

4 Vesicatores as { 1 Cantarades, 2 Sperewort, &c.

5 Caustick as { 1 Calx viva, 2 Lactivium, 3 Oile of Sulphur, &c.

4 Temperature { 1 hot, 2 dry, 3 subtle, 4 biting, 5 fires, &c.

5 Effects they { 1 heat, prick, bite, 2 open the passages, 3 penitrate, 4 attenuate, 5 draw out grosse humours, 6 evacuates and { urines, termes, uwear. 7 sends forth, 8 digesteth, 9 incisetb, 10 drieth, 11 purgeth and clenseth, 12 consumes, 13 liquifieth, 14 cause { 1 blisters, 2 asters, 3 rubification.

6 Things fit to accomplish this are— { 1 Pepper, 2 Cloves, 3 Greines, 4 Ginger, 5 Garlick, 6 Onions, 7 Squilla, 9 All the abovesaid and divers others to be used in time and place as occasion serveth, 10 Exceeding the bounds of mediocritie in excess and fiery heat.

Here follow the things of most note to be considered in every particular Region, part and member of the bodie.

Things of note concerning the head are generally, these two, *i.* the parts containing, be 5. *i.* the
1. Haire.
2. Skin.
3. *Membrana carnosa.*
4. *Pericranium.*
5. *Cranium*, or Scull.

The parts contained, are 5. *i.* the
1. *Dura mater.*
2. *Pia mater.*
3. *Retemirabile.*
4. *Vermiformis.*
5. *Cerebrum.*

Things of note of the parts of the face are these 11. *i.* the
1. Bones.
2. Front.
3. Temples.
4. Eie-browes.
5. Eie-lids.
6. Eies.
7. Eares.
8. Nose.
9. Cheekes.
10. Mouth, also the
    1. Lips.
    2. Teeth.
    3. Tongue.
    4. *Uvula.*
    5. Pallat.
    6. Iawes.
11. Chin.

Things of note of the parts of the neck, are these 15 following, *i.* the
1. Spondels.
2. Legaments.
3. Tendons.
4. Nerves.
5. Veines.
6. Arteries.
7. *Nucha.*
8. Paxwax.
9. Muscles.
10. Almonds.
11. Epiglot.
12. *Isophagus.*
13. *Ismon.*
14. *Thachia Arteria.*
15. *Gula.*

4 shoulder and great arme are 14. *i.* the

1 Bones.
2 Cartilages.
3 Ligaments.
4 Marrow.
5 Tendons.
6 Muſcles.
7 Nerues.
8 Veines.
9 Arteries.
10 Panicles.
11 Fleſh.
12 Skin.
13 Haire.
14 Nailes.

Things of note of the

5 Breaſt are generally two, *i.* the things contay-

1 Utter skin.
2 Fleſh.
3 Muſcles.
4 Panicles.
5 Bones.
6 Cartilages.
7 Nucha.
8 Paxwax.
9 Ligaments.
10 Nerues.
11 Paps.
12 Plura.

ning be 12. *i.* the

1 Trachia arteria.
2 Oelophagus.
3 Heart.
4 Panicles.
5 Lungs.
6 Midriffe.

ned be
el the

Things of note of the
- 6 Region of the belly are in generall two, *i.* the things contayned be 8. *i.* the
  1. ning
  - 1 Myrac.
  - 2 Syphac.
  - 3 Bones.
  - 4 Nucha.
  - 5 Nerves.
  - 6 Ueines.
  - 7 Arteries.
  - 8 Muſcles.
  2. ned be 12. *i.* the
  - 1 Cale.
  - 2 Liver.
  - 3 Gall.
  - 4 Spleene.
  - 5 Stomack.
  - 6 Inteſtines.
  - 7 Meſenterium.
  - 8 Reines.
  - 9 Bladder.
  - 10 Spermatick veſſels.
  - 11 Matrix.
- 12 parts below without froth be three, *i.* the
  - 1 Groyne.
  - 2 Yard.
  - 3 Cods.
- 7 Great legge it is
  1. divided into three parts, *i.* the
  - 1 Thigh.
  - 2 Shank.
  - 3 Foot.
  2. As in the great arme the Nucha excepted, and ſo but 13 particulars.

A briefe Anatomie of the parts of the bodie in generall, and first of the simple Members.

Simple members are 11. befides Haire and Nailes, as

1 Bones.
2 Cartalages, or griſtles.
3 Legaments.
4 Nerves, or ſinewes.
5 Cords, or tendons.
6 Veines.
7 Arteries, or heart pipes.
8 Panicles, or Felmes.
9 Fleſh.
10 Fat.
11 Skin.
1 Haire, } theſe two be excrementall parts.
2 Nailes, }

1 Bones are

1 Simple.
2 Spermatick.
3 Cold.
4 Dry.
5 Inſenſible, i. without feeling.
6 Inflexible, i. without bowing.
7 The bearers up of the body.
8 Many for divers cauſes.
9 248. in number after *Arabes*.
10 307. after ſome other.

2 Cartalages are

1 Simple.
2 Spermatick.
3 Cold.
4 Dry.
5 Inſenſible.
6 Partly flexible.
7 Ordained for five cauſes.
8 Next to the bones in hardneſſe.

Legaments are
1 simple.
2 spermatick.
3 cold.
4 dry.
5 insensible.
6 flexible.
7 to bind the bones together.
8 resting places to divers sinewes.
9 to hold up divers members.
10 harder / softer } then { Nerves. / Gristles.
11 a substance that springeth out of the bones and gristles

Nerves are
1 called sinewes.
2 simple.
3 spermatick.
4 cold.
5 dry.
6 sensible.
7 flexible.
8 strong.
9 tough.
10 of two sorts, i. { 1 sensatives. 2 motives.
the things that give voluntary motion to the cords, &c the instruments to convay the Animall spirits.

Cords are
1 called tendons.
2 simple in qualitie, but compound in substance.
3 spermatick.
4 cold.
5 dry, { 1 strong.
6 very { 2 tough.
7 partly sensible.
9 made of nerves and legaments for three cause.
10 mean, between legaments and nerves.

6 Veins are
1 simple.
2 spermatick.
3 cold.
4 dry.
5 the vessels to carry the bloud nutritive.
6 all begun in the Liver.
7 with on only coat or covering.
8 hollow of a nervous substance.
9 divers whereof two are most principall, *i. vena porta*, in that hollow part of the Liver; *vena cava*, in the bunchy part of the Liver.
10 said to be 365 of note, beside the Capillar Veines.

7 Arteries are
1 simple.
2 spermatick.
3 cold.
4 dry.
5 hollow and nervous.
6 all begun at the heart.
7 All with two coats, except *Arteria venalis*.
8 divers whereof two are principals as *Arteria* 1 *magna*. 2 *venalis*.
9 the Pulse.
10 vessels to carry abroad the vitall bloud and spirits.

8 Panicles are
1 some simple as 1 *periosteon*, *i.* the felmes that cover the bones. 2 *mediastina*, &c.
1 some compound as *Diaphragma*, &c.
2 spermatick.
3 cold.
4 dry.
5 made some to 1 cover divers members. 2 divide parts on from another.

Corda are

flesh

9 flesh is
1 some { 1 simple. 2 compound.
2 sanguine not spermatick.
3 hot.
4 moist.
5 caused of bloud.
6 of three kinds as flesh. { 1 simple and pure. 2 musculous, or brawny. 3 Glandulous, or kernelly.

10 fat is
1 simple.
2 not spermatick.
3 cold.
4 moist.
5 insensible.
6 made of the subtle parts of the bloud.
7 without sinewes in it.
8 of three kinds, *i.* { 1 *Adipes, i.* is that next under the skin. 2 *Pinguedo, i.* is that mixt with the flesh. 3 *Auxungia, i.* that about the Kidneyes and Intrailes.

11 skin is
1 simple.
2 partly spermatick.
3 temperate.
4 strong.
5 tough.
6 flexible.
7 sensible.
8 of two sorts, *i.* { 1 *Epiderimis, i.* is that true thin utter Skin. 2 *Panniculus carnosus, i.* the inner fleshy Skin.
9 made { 1 temperate the better to judge, 2 of { 1 Veines. 2 Arteries. 3 Nerves.
10 of divers properties in certaine places, and varieth according to the place whereon it groweth, for some { may / you } { cannot } flay.

of

1 Haires are
1 Excrementall parts and no members.
2 made of grosse fumosities.
3 cold.
4 dry.
5 made to
1 to cause comelinesse.
2 evacuate fumosities of the third digestion.
3 shew by their colour, &c. the temperature of the brain.
6 Superfluities.

2 Nailes are
1 Excrementall parts and no members.
2 superfluities.
3 cold.
4 dry.
5 softer then bones.
6 Tough like horne.
7 Engendred of earthy vapours.
8 made
1 the better to hold.
2 to
1 claw and scratch.
2 divide things the better.

Things of note concerning the head are generally these two *i.* the parts containing, are in particular 5. *i.* the
1 Haire,
2 Skin,
3 Flesh,
4 Panicle, *Pericranium*,
5 Scull.

2 ned, are these 5. *i.* the
1 *Dura* } *Mater.*
2 *Pia* }
3 *Retemirabile.*
4 *Vermiformis.*
5 Braines.

A further relation of those ten parts, what they are, with their proper places, &c.

1. The 5 parts cõtaining, *i.* the
1 Haire, *crinis*, is sufficiently spoken of in the tract of simple members.
2 Skin, *i. cutis*, is that in which the haire groweth.
3 *Membrana carnosa* is the hard flesh on the head growing betweene the utter Skin and *Pericranium*.
4 *Pericranium* is the Panicle that covereth the Scull without froth, between the *membrana carnosa*, and the bones of the Scull.
5 *Craina* the scul have 1.7. bones, *i.*
1. 1. *os coronale*, *i.* the bone of the forehead.
2 3. 2. *ossa lateralia*, *i.* the side bones of the head.
4. 5. 2. *ossa petrosa*, *i.* the hard stony bones of the eares whereon they grow.
6. 1. of *Basilare* { 1 called *Paxilla*. 2 *i.* the foundation bone of the head.
7 *occiput* { 1 called *lauda*, or *occipitiall bone*. 2 is the bone wherein the hole, afore the *Nucha* passeth.
2. 5 sutures, or seames, *i.*
3 true
1 *Coronale*, *i.* it goeth crosse over the mould of the head.
2 *Sagittales* joyneth the side bones to the crown of the head.
3 *Iamdoides* joyneth the hinder ends of the side bones to the bone *occipitiall*.
2. 2. False, that joyn the eare-bones to the side bones of the head.

The five things contained, *i.* the
1. *Duramater*, is the thick hard panicle within the Scull next under it.
2. *Pia mater*, is the soft mother, or panicle, next uuder *Dura mater*, in this the braine is wrapped.
3. *Rete mirabile*, *i.* the wonderfull Net, is set under the panicles, and is compoſed of Arteries that come from the heart, herein is the vitall ſpirits made Animall, in this Net is the braine inclоſed, from this hath the ſpirit of feeling its firſt creation, & thence paſſeth to other parts.
4. *Vermiformis i.* the two Wormelike ſubſtances in the middle ventricle of the head.
5. *Cerebrum* is the brains, it
   - 1 is of two ſorts, *i.*
     1. *Cerebrum* is the great marrowy ſubſtance in the fore-part of the head, &c.
     2. *Cerebellum*, it is the little hard braine in the hinder part of the head.
   - 2 have 3 ventricles, *i.* the (1 former, 2 middle, 3 hinder) ventricle.

Of the Anatomy of the face.

Things of moſt note of the parts of the face are theſe eleven, *i.* the
1. Bones,
2. Front,
3. Temples,
4. Eye-browes,
5. Eye-lids,
6. Eyes,
7. Eares,
8. Noſe,
9. Cheeks,
10. Mouth,
11. Chin.

A further relation of those parts, for your better understanding hereof.

Of those 11. things, *i.* the

1 Bones called *ossa facies*, are nine.
2 Front, called *frons*, *i.* the fore-head.
3 Temples, called *Tempora*.
4 Eye-browes, called *Supercilia*.
5 Eye-lids, called *Palpebræ*.
6 Eye, called *oculus*, each Eye hath
  1 A Nerve, called *Nervus opticus*.
  2 Seven Tunicles.
  3 Three Humours.
  4 Seven Muscles.
  5 A kernet of teares in the corner next the Nose.
  6 Veines.
  7 Arteries, &c.
7 Eares are called *Aures*.
8 Nose is called *Nasus*.
9 Cheeks are called *Genæ*.
10 Mouth called *Os* in the which are these things of note, *i.* the
  1 Lip, *i. Labra*.
  2 Teeth, *Dentes*.
  3 Tongue, *Lingua*.
  4 *Vuvla*.
  5 Pallat, *i. Palatum*.
  6 Iaw-bones, *i. Maxilla*.
11 Chin, called *Mentum*.

This part reacheth from the { 1 foundation bone of the head behind, to the [illegible] of the seventh Spondle.
2 *Epiglot* to *Gula* before.

1 Spondels.
2 Ligaments.
3 *Nucha.*
4 Nerves.
5 Veines.
6 Arteries.
7 Paxwax.
8 Muscles.
9 Almonds.
10 Epiglot.
11 *Isophagus.*
12 *Ismon.*
13 *Thachia Arteria.*
14 *Gula.*

Things of note of the neck are 14, *i.* the

A further Relation of these.

1. 7. Spondels, or turning joynts of the neck.
2. 7. Paires of Nerves of those Spondles.
3. Marrow of those Spondles called *Nucha.*
4. Ligaments.
5. Veines, *Jugular* or *Guidigi*, &c.
6. Arteries.
7. Paxwax called *Serviis*, *i.* the white haire.
8. Muscles being 20.
9. Almonds called *Amigdales.*
10. *Epiglot*, *i.* called *Lagulam*, of some *Operculum laringis*, is the knot or gristle in the throat at top of the wind-pipe.
11. *Oesophagus*, is the gut that carrieth the meat and drink from the mouth into the stomack, &c.
12. *Ismon* is above between the *Oesophagus*, and the *Trachia arteria.*
13. *Trachia arteria*, *i.* the wind-pipe.
14. *Gula*, is the pit or box, at the nether end of the neck before, at the upper end of the brest between the two *furcula* bones.

Of

Things of note of the shoulder and great arme 14. *i.* the

1 Bones,
2 Cartilages,
3 Ligaments,
4 Marrow,
5 Panicles,
6 Nerves,
7 Veines,
8 Arteries,
9 Flesh,
10 Muscles,
11 Cords,
12 Skin,
13 Haire,
14 Nailes.

A further relation of these.

1 Shoulder are 3. *i.* the
- 1 *Os spatula, i.* the shoulder blade.
- 2 *Os furcula, i.* the Camell bone.
- 3 *Adjutory, i.* the bone from the shoulder to the Elbow.

2 Great arme are 30. *i.*
- 1 On Adjutorie.
- 2. Two focils, *i.* { 1 *major,* 2 *minor,* } these two reach from the Elbow to the Wrist.
- 3. 8. Wrist. { 1 bones called, *Rasseta manus.* 2 *i.* 4. { 1 above 2 beneath } at the ends of the { 1 *focils* 2 *Ossa platinis* }
- 4. 5. called *ossa platinis, i.* the bones in the palmes of the hands.
- 5. 14. *Ossa digitorum* { 1. three in each finger. 2. two in each finger.

1 Bones of the
2 Cartilages,
3 Ligaments,
4 Marrow,
5 Panicles,
6 Nerves,
7 Veines of note to let bloud in it are these 6, *i.* the
- 1 *Basilica,* called the Liver veine
- 2 *Cephalica, i.* the head veine
- 3 *Mediana,* { 1 The middle veine 2 called { 1 *Vena nigra,* 2 *Cardiaca.* 3 The common veine } } of the Arme.
- 4 *Fonis Brachii*, proceeds from the shoulder Veine, and spreads with divers branches on the back of the hand.
- 5 *Cephalica oculorum* appeares betweene the thumbe and the fore-finger, and is a branch of *Cephalica.*

8 Arteries.
9 Flesh

10 Muscles of note of the great Arme are 13. *i.* { 1 2 3 4 4 5 } no the { 1 adjutory 2 *Focils.* 3 Hand. }

11 Cords,
12 Skin,
13 Haire,
14 Nailes,
} Of these and all other things herein for brevity herein omitted, I referre you to my next Tract of Anatomy, which shall be more at large, if God permit me time.

Note that the great Legge is composed of the like things as the great Arme.

Of

Of the Anatomie of the Breſt, this part reacheth from Oſſa furcula, *downe to* Diaphragma.

Things of note of the Breſt are generally two, *i.* the things containing, 2 ning are theſe 12, *i.* the

1 Vtter Skin.
2 Fleſh.
3 Muſcles.
4 Panicles.
5 Bones.
6 Griſtles.
7 Nucha.
8 Paxwax.
9 Ligaments.
10 Nerves.
11 Paps.
12 Plura.

A further relation of theſe.

1 Vtter Skin, called *Cutis.*

2 Fleſh, *Caro.*

3 Muſcles, called *Exercitus*, or *Muſculus*, are eighty, and after ſome Writers, ninety.

4 Panicles, or the *Membranes*, &c. thoſe that cover the bones.

12 Twelve Spondels beginning at the laſt Spondle of the neck, and ſo reacheth downwards.

5 Bones of this Region are 27. *i.*
- 2 Three breſt-bones, called: 1 *Peſtorale.* 2 *Sternon.*
- 3 Twelve: 1 Seven called, *Coſtæ veræ.* 2 Five called: 1 *Coſtæ ſpuriæ.* 2 The ſhort ribs.

6 Griſtle, *Enſiformis*, it groweth at the lower end, of the nether Sternon bone in the breſt before.

7 Nucha, *i.* the marrow of thoſe 12 Spondels.

8 Paxwax.

9 Ligaments.

10 Twelve paire of motive Nerves of thoſe Spondels.

11 Paps of a glandulous ſubſtance, or fleſh.

12 Plura, *i.* the panicle that covers the
- 1 Ribs within.
- 2 upper part of *Diaphragma.*
- 3 *Trachea Arteria.*
- 2 ned of note within the Breſt are generally theſe ſix, *i.* the
  - 2 *Oeſophagus.*
  - 3 Heart. 4 Panicles.
  - 5 Lungs. 6 Midriff.

Things of note of the things contayned in the Breft being 6x as foresaid, i. the

1 *Trachia Arteria*, i. the wind pipe that brings aire to the Lungs and Heart.
2 *Oesophagus*, i. called Merie.
3 Heart in which note these seven things.
- 1 It is
  - 1 called *Cor*.
  - 2 a principall member, the Well of heat and life.
- 2 it hath two Ventricles, i. the
  - 1 right,
  - 2 left.
- 3 The two
  - 1 deafe Eares.
  - 2 great Arteries of the left Ventricle, *Arteria*.
    - 1 *Venalis*, to carry bloud to the Lungs, and brings back aire to the Heart,
    - 2 *Magna*.
- 5 Into the right Ventricle commeth a Vein into the Heart, to bring it bloud nutritive, from *vena cava*.
- 6 It is wrapped in the *capsula cordis*, a thicke Panicle like a purse.
- 7 it hath two motions.
  - 1 *Diastole*, i. opening
  - 2 *Systole*, i. closing

of the Heart and Pulse.

4 Panicles of note are three i. the
1 *Pleura* a foresaid.
2 *Capsula cordis*.
3 *Mediastine*, i. a Panicle that divideth the breft right downe, i. divides the right side from the left.

5 Lungs of it consider these seven things of note
- 1 It is called *pulmo*, i. the lights.
- 2 The temperature is
  - 1 naturally cold and dry.
  - 2 accidentally cold and moist.
- 3 Their creation is first spermatick.
- 4 It hath
  - 1 Two parts, on each side of the Breft on part.
  - 2 Five lobs, i.
    - 1 Three on the right
    - 2 Two on the left

  side.
- 5 They were ordained for three causes, i. to
  - 1 draw in Aire,
  - 2 purifie and temper the Aire,
  - 3 receive the fumous superfluities that the Heart doth breath forth.
- 6 Their vessels of note are three, i. their
  - 1 Veines,
  - 2 Pipes,
  - 3 *Arteria venalis*,
  - 4 *Trachia Arteria*.

Their ligaments.

7 Midriffe
- 1 called
  - 1 *Diaphragma* in Greeke.
  - 2 *Septum transversum*, in Latin.
- 2 Is set at the lower part of the Breft to divide the spirituals members from the nutritives.
- 3 The
  - 1 upper part
    - Is made of the Panicle
      - 1 *Pleura*,
      - *Peritoneum*.
  - 2 nether middle between these 2. Panicles towards the ribs is *lacertus* flesh.
- 4 Was made for
  - 1 send the spirituals that the nutritives oppresse them not,
  - 2 keepe that the vitall heat descend not downe too much.
  - 3 defend the Spunels from maligne fumes.

of

Things of note of the Region of the belly are generally two, i. the things containing of note are generally these 8. i. the

1 Myrac,
2 Syphac,
3 Bones,
4 Nucha,
5 Nerves,
6 Veines,
7 Arteries,
8 Muscles.

A further relation of these eight things.

1 *Myrac.*
- 1 called { 1 so in *Arab*, 2 *Abdomen* in Latine.
- 2 is all the whole substance of the belly, from *Syphac*, outward.
- 3 is made of these 4, i. the { 1 utter skin, 2 fat, next under that skin, 3 *Carnosus*, fleshy panicle, musculous flesh.
- 4 in this substance are eight muscles, i.
  - 1. 2. longitudinals, { 1 called *musculi recti*, { 1 wind, 2 urine, 3 egestion. } 2 to draw out }
  - 2 latitudinals { 1 called *musculi transversi*. 2 to retaine things. }
  - 3. 4. *Obliqui* { 1 called *musculi obliqui*. 2 to expell { 1 ventositie, 2 urine, 3 odours, &c. }

2 *Syphac.*
- 1 called the *Peritoneum*.
- 2 is the inner skin that covereth the belly, and also maketh the nether panicle of *Diaphragma*.
- 3 groweth to *Myrac*, and seemeth to be part of its substance.
- 4 is { 1 spermatick, 2 cold, 3 dry, 4 nervous, 5 sensible.
- 5 the breaking of it below is called a rupture.
- 6 note in large wounds of the belly, such *Myrac* and *Syphac* both together.

3 bones
- 1. 5 spondels { 1 of the backe, called *lumborum vertebræ*, { these begin at the lower rib, and reacheth to *os sacrum*.
- 6 lower spondels are all joyned with *os sacrum* by sympathy, but the lowest of those six is a gristle called *os caudæ*, i. the taile bone.
- 2. Two pin bones joyned be- { hind to *os sacrum*, fore, and do make *os pubis*, i. the share bone.

4 *Nucha* is in all these 11 even spondels likewise.

5 Nerves that come from these spondels are 11 paire, & one odde nerve.

6 Veines,

7 Arteries.

Things of note in the region of the belly contay-

1 Call,
2 Liver,
3 Gall,
4 Spleene,
5 Stomacke,
6 Guts,
7 Meſenterium,
8 Reines,
9 Bladder,
10 Spermatick veſſels,
11 Matrix,
12 The parts below without froth.

A further relation of thoſe 12. parts.

1 Call
- 1 called
  - 1 *Zirbus* in Greeke,
  - 2 *Omentum* in Latine.
- 2 is the fat Call that covereth the bowels next within *Syphac*.

2 ned, are 1 s, i. the 2 Liver,
- 1 called in
  - Greeke, *Hepar*,
  - Latine, *iecur*, i. *maſſa ſanguinis*, i. a maſſe or lumpe of congealed bloud.
- 2 it lyeth
  - 1 under *Diaphragma*,
  - 2 in the right ſide under the ſhort ribs.
- 3 is
  - 1 Spermatick in the firſt creation, and after become ſanguine.
  - 2 a principall member,
  - 3 hot and moyſt,
  - 4 inſenſible of it ſelfe,
  - 5 the place of the ſecond digeſtion,
  - 6 Globous and round, on the outſide,
  - 7 hollow in the inſide towards the ſtomack,
  - 8 the originall ſeat of all Veines,
  - 9 bound to *Diaphragma*,
  - 10 ſenſible by accident.
- 4 have
  - five lobs,
  - Two notable veins, i. *venæ*,
    - 1 *Porta*, i in the hollow,
    - 2 *Cava*, i. *magna*, in the bunchy

  } part of the Liver.

3 Gall,
- 1 called
  - 1 called *veſicula fellis*,
  - 2 the bladder of the Call.
- 2 is
  - 1 the receptacle of cholerick ſuperfluities,
  - 2 | 1 ced in the concavitie of the Liver,
  - Spermatick,
  - 4 in moſt men halfe a pint.
- 3 have 3. orifices, i.
  - 1 on to draw in choler, the other to clenſe the bloud in the Liver,
  - 2 Two to ſend
    - 1 Stomack, to ſcoure out
      - 1 ſlime,
      - excrements
    - 2 gut *pilorū*,
      - choler to the

4 Spleen is
- 1 called *lienæ*, i. the Milt or Spleen,
- 2 Spermatick,
- 3 cold,
- 4 dry,
- 5 the receptacle of Melancholy placed on the left ſide under the
  - 1 Midriffe,
  - 2 ſhort ribs.
- 6 faſtned to the
  - 1 Liver behind to draw away the fecks of the bloud.
  - 2 Stomack before to caſt in a ſowre juice, to cauſe the ſharper appetite.
- 8 ordained for three
  - 1 nouriſh it ſelfe,
  - 2 clenſe the bloud from Melancholy.

2 ned, are 12, i. the

1 called *ventriculus*,
2 under *Diaphragma*,
3 lieth betweene the Liver and the Spleene,
4 compound,
5 Spermatick,
6 Nervous,
7 very sensible,
8 made of two Panicles, i. the { 1 inward, 2 utter.
9 the place of the first digestion,
10 narrow above and wide beneath,
11 the first foundation of nourishment to all parts.
12 in quantity three pints.
13 fastned { 1 above to *Oesophagus*, 2 below to the Gut *Duodenum*.
14 in forme { 1 much like the bagge of a Bag-pipe, 2 both ends partly upward, 3 with the nether passage better then the other 3 for causes as shall in the next Tract be declared.

And are called the Intestines.

Things of note in the region of the belly contay-

1 *Duodenum* { 1 groweth to the nether mouth of the stomacke, 2 is { twelve inches long, 3 { 3 also called *pilorum*.
2 *Iejunium* { 1 The empty or fasting gut is ever more found empty 2 Into this gut passeth choler from the gall to clense it.
3 *Ileon*, the small gut, this is { 1 fifteene or sixteene cubits long, 2 called in Latine *Tenue*.
4 *Monocubus*, i. { 1 The blind gut, called *saccus*, i. a sack, 2 This gut seemeth to have but one end, 3 There goeth no *Mesentwy* Veines beyond this gut, to draw any juice because all the food is spent before.
5 *Colon* { 1 is the great gut { 1 full of wrompples, 2 in it is bred the wind Collick, 2 receiveth all the drosse being past all nourishment, 3 have no *Mesenteries* come to it.
6 *Longaon* { 1 called { 1 *intestinum rectum*, led { 2 the gut of the fundament. 2 is a span long, 3 reacheth neere to the Kidneyes. 4 have { 1 Muscles in the nether end some say { Two i. one to { 1 open, 2 close. { 4 one to { 1 open, 2 shut, 3 retaine, 4 expell. 5 Hemoroidal Veines that come to it from the Liver and Spleen.

Things

Things of note of the region of the belly contay-

2 ned are
1 2. *i.* the

7 *Meſenterium*
1 called the *Megirum*, or the Crow of ſome.
2 is the fat ſubſtance that holdeth the guts together.
3 keepeth the guts together, and tyeth them in their places.
4 is full of { 1 Veines menſetery, *i.* ſucking Veins. 2 kernels mixt with the fat therof
5 groweth faſt to the back.
6 The Veins thereof are called *meſeraica vaſa*, whoſe innumerable Veins ſerve to draw the *Chylus* that is made in the ſtomacke by the digeſtion, from the ſtomacke and guts into *vena porta*, in the hollow part of the Liver.

8 Reins are
1 called *Renes*, *i.* the Kidnies.
2 lacertous fleſh.
3 Two in number.
4 tied faſt to the backe.
5 like to the Kidnies of a Cow.
6 placed { 1 on each ſide within towards the backe of the nethermoſt or twelfth ſpondle of the breſt, or very neere thereunto. 2 the right ever higher then the left. 3 with fat about them, ever to temper the heat made about them, by ſharpneſſe of the urine, &c.
7 made { 1 to cleanſe the bloud from watry ſuperfluities. 2 with two fine paſſages, the one to { 1 draw the watry part of the bloud from *venakelis*, by the emulgent veins to the Kidnies. 2 ſend the urine to the bladder which paſſage is called *porus ureticus*.
8 of harder fleſh then any other member for two cauſes, *i.* the better to { 1 reſiſt the ſharpneſſe of the urine without hurt. 2 Alter and cleanſe the urine.

Things of note of the region of the belly contained, be these 12. i. the

- 9 Bladder is
  - 1 called *Vesica*.
  - 2 Spermatick.
  - 3 compound with many Veines and Arteries, &c.
  - 4 cold. 5 dry.
  - 6 made of two Panicles.
  - 7 Carnous, or fleshy on the neck.
  - 8 placed
    - 1 Men, betweene the share bone and
      - 1 Longaon,
      - 2 The Matrix.
    - 2 Women,
  - 9 The receptacle of urine.
  - 10 A pint or more.
- 10 Spermatick vessels, *i.*
  - 1 called *vasa seminaria*,
  - 2 Come from *venâkelis* and *arteria magna*.
  - Some
    - 1 bring fit bloud for it to the testicles, to be there changed into Sperme.
    - passe from the testicles to cast the Sperme from them, in
      - 1 Men into the yard.
      - 2 Women into the bottome of the Matrix.
- 11 Matrix
  - 1 the
    - 1 neck is called *Cervix uteri*,
    - 2 port is called *Vulva*.
  - 2 is
    - 1 cold,
    - 2 dry,
    - 3 Spermatick,
    - 4 compound of
      - 1 Veines,
      - 2 Arteries,
      - 3 Nerves, &c.
    - 5 placed betweene Langaon and the Bladder.
    - 6 much like the Bladder in forme.
    - 7 The field of mans generation.
  - 3 Embreon in which the
    - 1 first things shaped are the
      - 1 principall members
      - 2 bones and Cartilages.
      - 3 other members all in generall.
    - 2 next
    - 3 last
    - 4 *Secundine* is the Panicle or Wrapper in which the child lieth.
    - 5 Rest of these things that might be here spoken of, concerning these matters for brevitie I omit.
- 12 parts below.

The

The twelfth of the parts below without froth are the

1 Groines { 1 or flankes called Inguniæ, or Emunctories, the clenſing place of the Liver. 2 are full of Glandules or Kernels.

2 Yard. { 1 called *virgam*. 2 whoſe { 1 he is { 1 called *glans*, 2 true and ſimple fleſh. 2 utter looſe skin that covereth over the head of it, is called *præputium*.

3 Cods { 1 called *Scrotum*. 2 containeth in the theſe ſixe things, *i.* the { 1 *Didimos, i.* the hollow ſtring that holdeth the ſtone. 2 Teſticles, *i.* the ſtones. 3 *Dartos, i.* the Fanicle that covereth the ſtone next within the *Dedim.* 4 *Erythroeida, i.* the next thin covering within the *Dartos.* 5 *Epidydimis*, is a Glandell that cleaveth to the upper part of each ſtone. 6 Seminary veſſels, that erect the ſeed from the ſtones into the Yard.

Of the Anatomy of the thigh and great legge, which reacheth from the Pin-bone to the top of the toes.

The great leg is divided into 3. parts, *i.* the

1 Thigh have. { 1 one bone { 1 called *fœmora*, or *coxa*, 2 it reacheth from the pin-bone to the knee, 2 the other parts as that of the great arme.

2 Shank have { 1 On whirle bone on the knee called { 1 *rotula genu*, 2 The knee pan. 2 bones, { 1 that reach from the knee to the Ancle. 2 called *focile* or *Tibia*, { 1 *majus*. 2 *minus*. 3 The greateſt is the ſhin-bone, whoſe nether end maketh the inner Ancle, leaſt ſtandeth on the outſide of the legge from the gartering place under the knee downe to the utter ancle, the nether end of it maketh utter Ancle.

3 4. Veines, ſee ☞.

The

The great Legge is divided into three parts *i.* the

2 Shank-have
- 4 Veins to be opened by Phlebotomy, *i. Vena.*
  - 1 *Poplotica, i.* the Veine vider the ham.
  - 2 *Saphena,* is on 1 in 2 out fide of the Ancle.
  - 3 *Sciatica,* is on 1 in 2 out fide of the Ancle.
  - 4 *Kenalis, i.* the veine that lyeth between the little Toe and the next to it.

3 Foot have 26 bones, *i.*
- 1 *Os Talus, i.* the bone next under the focils of the Legge,
- 2 *Os Calcis,* the heele bone, it is joyned behind to *os Talus,* under it.
- 3 *Os naviformis, i.*
  - 1 the fhiplike bone, *i.* the bone of the inftep,
  - 2 is joyned to *Os Talus,* under the fore part of it.
- 4 *Offa Raffita pedis,* be 4, *i.*
  - 1 On called *Cubiforme, i.* the fquare Dye-bone in the infide of the heart of the foot.
  - 2 Three called *Chalcoidea.*
- 5 *Offa planta pedis,* be five fmall bones in the plant of the foot, reaching from the aforefaid foure bones to the bones of the Toes.
- 6 of the Toes are
  - 1 next below joyning to thofe five bones laft above faid.
  - 2 fourteen *i.*
    - 1 Two in the great Toe.
    - 2 Three in each other Toe.

4 Bones of the great Legge from the hip downwards are 30. *i.*
- 1 on in the thigh.
- 2 one on the knee.
- 3 Two in the Legge from the knee to the ancle.
- 4 fix and twenty in the inftep and foot.

5 Other parts are like thofe of the great Arme.

Laus DEO.

FINIS.